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ABSTRACT

The tenth annual report on institutional training under the Manpower Development and Training Act is organized as follows: (1) MDTA institutional training highlights: 1962-71; (2) the program in profile--training opportunities, characteristics of institutional trainees, occupations of training, institutional training programs, state programs, national programs, training institutions, skills centers, opportunities industrialization centers, community colleges and institutional training, private schools, part-time training and individual referrals; (3) MDTA: career development--careers in the environmental occupations, careers in the medical occupations, minority business enterprise, training for persons in redevelopment areas, American Indians, training for correctional institution inmates, programs for veterans, programs with other government agencies, the Spanish-speaking, CAMPS; (4) improving program administration; and (5) measures of achievement--State program assessment, earnings of MDTA trainees, national evaluation studies, skills center study, quality and relevance evaluation study, MDTA outcomes study, systems analysis study, other national evaluation studies. Statistical tables and lists of manpower training skills centers and area manpower institutes for the development of staff (AMIDS) are contained in appendices. (KM)

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education and training

TEN YEARS OF PROGRESS

1972 Report of The Secretary of Health, Education, and Welfare to the Congress on the Manpower Development and Training Act

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authorization

Prior to April first of each year, the Secretary of Health, Education, and Welfare shall make an annual report to Congress. Such report shall contain an evaluation of the programs under Section 231, the need for continuing such programs, and recommendations for improvement.

Section 233
Manpower Development and Training
Act of 1962, as amended

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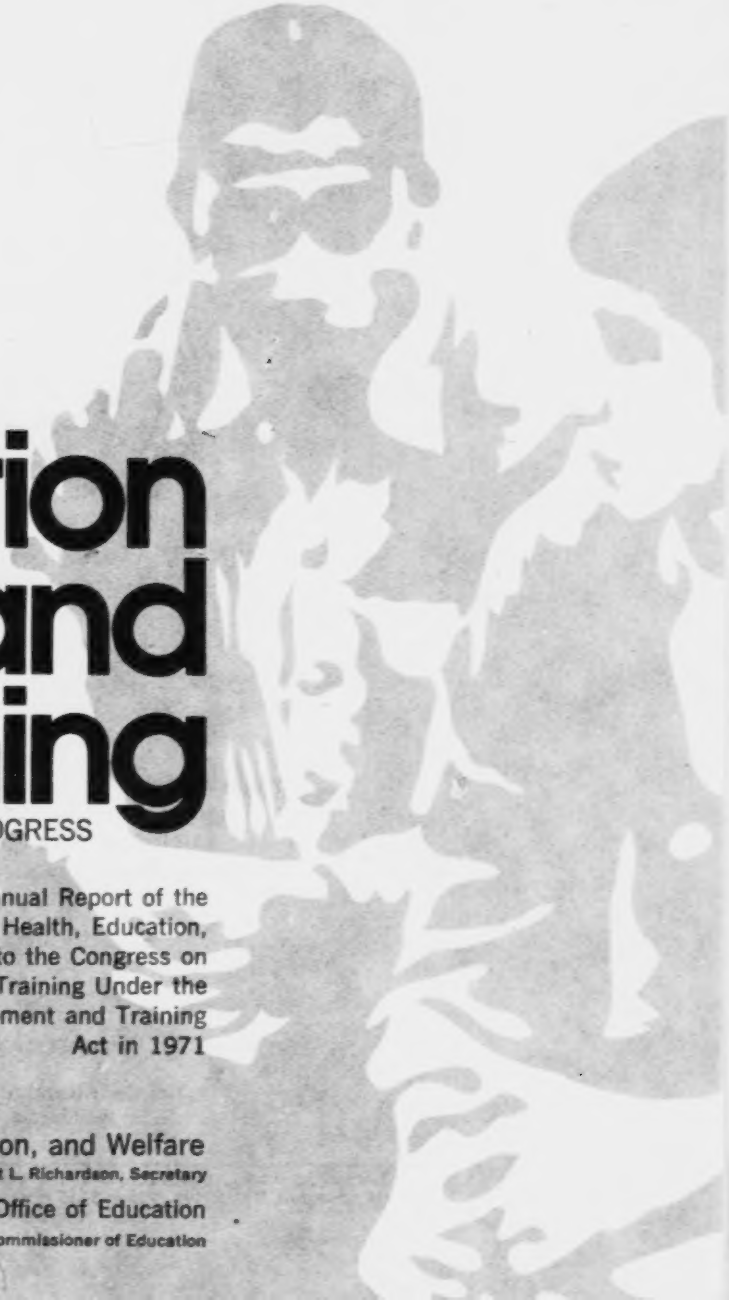

education and training

TEN YEARS OF PROGRESS

10th Annual Report of the
Department of Health, Education,
and Welfare to the Congress on
Institutional Training Under the
Manpower Development and Training
Act in 1971

U.S. Department of Health, Education, and Welfare
Elliot L. Richardson, Secretary

Office of Education
S. P. Marland, Jr., Commissioner of Education

This Report was prepared in the
Division of Manpower Development and Training,
Bureau of Adult, Vocational, and Technical Education,
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I. MDTA institutional training highlights: 1962-71
II. the program in profile
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I.

MDTA institutional training highlights

TEN YEARS OF PROGRESS . . .

When the Manpower Development and Training Act (MDTA) was enacted in 1962, the public school systems of the United States had neither the resources nor the commitment to help out-of-school youth, displaced workers, and other adults acquire the job-related education and training needed to help them qualify for entry-level employment opportunities or for upgrading their skills. By the end of 1971, under the MDTA, many of these same school systems had the means and the incentive to offer skill training, retraining, and the remedial instruction needed for realistic employment opportunities to unemployed and underemployed youth and adults.

Since 1962 these training opportunities have been offered to more than 1.7 million people. Of the 1,125,000 men and women successfully completing their training since that time, about 75 percent were employed as a result of this training. Studies of employed graduates show median salary increases, after training, of 32 cents per hour. A major evaluation study of the outcomes of over 5,000 new trainees noted that: "Median gain in annual income following participation in a Manpower Development and Training Act (MDTA) program for those with at least one post-training job was $1,876 for Institutional enrollees and $1,614 for those trained On-the-Job."

TEN YEARS AGO . . .

There were no institutions—private or public—to provide education and training for unemployed and underemployed persons who had been unable to benefit from their experience in the traditional educational system. At the end of the calendar year 1971, 80 MDTA skills centers were in operation, serving all regions of the United States. These centers, developed by public school manpower educators, are unique because:

- They evolved from the need for a different type of education training institution to serve those people who had found the traditional education system unworkable for them;
- They provide employment-oriented basic education and both remedial and skill training when, and where, citizens and employers in a community have need for these services;
- They draw upon the many support services of the communities they serve; and

- They establish a cooperative relationship with the business and industrial community—a relationship which enhances the trainees' chances of getting a good job.

A special evaluation study of manpower training skills centers, conducted by Olympus Research Corporation, noted in the final report:

> "Perhaps the most valuable aspect of the Skills Center concept is that it recognized, more than any other federally sponsored manpower program, that there is no easy way of preparing the disadvantaged for permanent and productive employment. Skills Centers emphasize not only vocational training, but programs to increase the individual's capacity to function in a changing labor market. Inherent in the Skills Center concept is the recognition that in the long run the only way to help a person find economic security is to provide for an increase in his capacity to compute, communicate and comprehend at the highest possible level, and to encourage continuous training and education throughout all of an individual's working life."

TEN YEARS AGO . . .

Innovative educational techniques to prepare people for employment were not encouraged or in widespread use. Instead, traditional and artificial divisions of training time into semesters, quarters, and the like dictated when the trainee could enter and leave the education experience.

Today MDTA uses the occupational cluster, and open-entry/open-exit training program practices. These practices open a variety of occupational skills to the trainee and permit him to enter training when he is ready and to leave when he has achieved his training goal. These educational techniques are finding their way back into many public school systems.

TEN YEARS AGO . . .

A traditional credentialing system in teacher education institutions deterred a large number of otherwise talented people from entering the administrative, counseling, and teaching rosters. This system effectively kept these people as well as licensed persons from learning about the many problems of potential trainees hindering their successful preparation for the labor market. Today, the public school systems, as well as other public and private agencies and institutions, are using the services of the seven Area Manpower Institutes for the Development of Staff (AMIDS) to train manpower staffs to understand and help the trainees.

- AMIDS help potential MDTA instructors to acquire the classroom techniques needed to communicate skills to trainees.
- AMIDS make it possible for a vast and heretofore untapped resource of teachers to bring their expertise into classroom and the shop.
- AMIDS provide an innovative—and unconventional—way for MDTA staff to meet the certification requirements of the State education agencies. The institutes are not a substitute for formal schooling, but a supplement.
- AMIDS provide staff development to instructors, administrators, and counselors who understand and appreciate the cultural diversity of MDTA trainees. They also assist MDTA staff in acquiring the most effective training techniques to help the trainees. Over 100,000 instructors, counselors, administrators have been provided inservice training to help them meet the special needs of manpower trainees, especially the "disadvantaged."

TEN YEARS AGO . . .

Many State education agencies had rigid requirements respecting the time period to qualify for the General Education Development (GED) examination. Because this was unrealistic for MDTA trainees who needed to "get going" educationally, many States have now relaxed the time requirement, permitting MDTA trainees—and others—to qualify immediately for the GED. Many trainees have taken advantage of this opportunity to obtain their high school equivalency diploma.

TEN YEARS AGO . . .

A comprehensive Federal excess property program for public education agencies and institutions engaged in training activities did not exist. Through MDTA innovative efforts in using excess Federal property, since 1967, some $40.9 million in public tax dollars have been saved. This amount would otherwise have been spent to purchase equipment and supplies had they not been made available through excess property programs. Overall, institutional training programs have had over $100 million in excess Federal personal property transferred to them. The money saved was used for program enrichment and the property remains in Federal ownership.

TEN YEARS AGO . . .

Training in correctional institutions had been sporadically and inadequately supported. Today, through the foresight of the Congress in directing MDTA resources into correctional institutions, there exist several highly innovative and pathmaking education and training programs in correctional institutions, using both the work and training-release techniques.

TEN YEARS AGO . . .

The community college program in the United States began to strive for academic respectability and pursue the 4-year status with avidity. While efforts toward these goals go on, many junior and community colleges by the end of 1971 were providing training and education for MDTA programs. The interest shown by junior and community colleges in their approach to the MDTA program has resulted in educational benefits to the MDTA trainee and has shown in turn that these educational institutions can adjust their curriculum class structuring, etc., to better meet the student needs. Participating institutions have demonstrated their willingness and their capability to accept the MDTA trainee "where he is" educationally, prepare him for employment, and then prepare him for moving up the educational ladder.

These, then, are some of the highlights of the past 10 years of the institutional training program—many of them unforeseen by the Congress and program administrators at the time the legislation was drafted. The report that follows describes some of the past year's activities in greater detail and concludes with summaries of four major evaluation studies completed during 1971.

THE PROGRAM IN PERSPECTIVE

Ten years of operating the institutional training program under the Manpower Development and Training Act have generated some educational developments of potential long-range benefit unforeseen by the drafters of the original legislation. The mandatory involvement of State and local education agencies in the program and the law's flexibility enabled MDTA program administrators to revise many traditional education and training practices and develop new ones to meet the special needs of MDTA trainees.

For example, basic education instruction has become a component of many manpower institutional programs. Contrary to the traditional practice of educational scheduling, with its arbitrary divisions of time, MDTA program administrators injected maximum flexibility into the training process by introducing open-entry/open-exit scheduling to permit a trainee to enter the program at any time and leave when he is ready for employment. This had major impact on trainee morale and on the success of the placement process. Another educational technique, the occupational clusters, was adopted to give trainees greater latitude in selecting the occupation and the particular skill level for which they train. MDTA institutional training has demonstrated that training time for many occupations can be compressed without sacrificing the quality of a training program or the skill levels to be acquired.

Additionally, two new "institutions" evolved: the manpower training skills centers; and, the Area Manpower Institutes for the Development of Staff (AMIDS). Skills centers, given emphasis under the 1968 amendments to the MDTA, provide a broad range of education, training, and support services heretofore unavailable to out-of-school youth and adults who require special assistance to qualify for employment.

Efforts have continued to improve existing manpower training skills centers and to develop new ones. In 1971, there were 80 designated skills centers in operation including 13 centers that received preliminary designation. The guidelines for planning and operating skills centers were developed by the Department of Health, Education, and Welfare and the Department of Labor in 1970 and became effective in 1971. The initial application of the guidelines made possible the development of multiagency trainee support teams, joint agency program reviews, and greater involvement of the skills centers' directors on the councils of the Cooperative Area Manpower Planning Systems (CAMPS).

Starting with one site in the latter part of 1968, the Area Manpower Institutes for the Development of Staff (AMIDS) now number seven throughout the United States. These national training and resource sites are for all persons and/or agencies engaged in and responsible for human resource development in manpower and related programs. By the end of 1969 some 10,000 people had participated in these staff development and assistance programs. In the following year, participation in AMIDS increased by approximately 27,000. At the end of 1971, over 60,000 people had participated in the in-depth learning experiences designed to flow outward from the AMIDS sites to classrooms, training shops, offices, counseling offices, job development centers, and job locations.

Because of the importance of improving and expanding the guidance and counseling services in all MDTA programs, AMIDS have initiated training for counseling personnel in special field-based laboratories where participants can work within the community to attain a better understanding of the people served by manpower programs. The Transition program for returning veterans is also making use of AMIDS seminars for instructors in guidance and counseling, both in the continental United States and at selected locations abroad.

AMIDS have further proved to be a resource for curriculums and for new techniques in making training effective for those for whom the "system" has not worked. They have provided a vehicle for the exchange of information and materials to assure coordination of effort and cross-fertilization of ideas. Study-reference rooms have been established for use by participants at AMIDS sites. Work is continuing both in the AMIDS and at the national level to develop and update instructional materials to meet identified national needs. These educational techniques and innovations, described in detail in chapter IV, are finding their way into the structure of public school education where they have a potential to benefit those who need education and training for employment.

Under the MDTA, the Department of Health, Education, and Welfare is responsible for institutional training through public and private educational agencies carried on in classrooms, shops, and laboratories. The Department of Labor designates the occupations for which training is to be provided, selects and refers individuals to manpower training programs, follows their progress, places them in employment, and is responsible for on-the-job training.

Over the past 10 years the manpower program has demonstrated that a significant capacity for training and retraining exists both inside and outside the public school framework. It has also disproved some as yet entrenched ideas about how long it takes the American worker to develop skills for entry-level employment, or for entering apprenticeship training, or for completing on-the-job training.

More than 1.7 million persons have enrolled for training in a wide variety of skills since enactment of the manpower legislation in 1962. Course offerings have been expanded to more than 600 different skills, including training in such new and emerging fields as oceanographic science and exploration, environmental control, auto emission control and associate professions in health. Successful efforts are being made to open up new job areas to minority groups and others who, because of educational, cultural, and linguistic barriers have heretofore been excluded from them. In critical manpower areas, aerospace, for example, program resources and efforts were redirected to mitigate some of the effects of changing national priorities with the establishment of a number of retraining programs and services for former aerospace workers.

During 1971, over 77 percent of the 135,900 unemployed and underemployed youth and adults who completed manpower training programs found jobs as a result of their training.

A number of MDTA projects have stressed involvement of the community by purposely contacting and involving schools, employers, and the trainees' family and friends. Community involvement in the education and training process appears to strengthen the trainees' commitment to the program. Further, it assures greater cooperation of community leaders whose understanding of the goals and obstacles in the training-employment process is vital to the program's success. The community involvement approach has particular benefits when employed in the development of manpower training programs for Indian and other cultural and linguistic groups.

Consistent with the Administration's policy of promoting training programs and other activities to reduce environmental pollution, "teach-ins" were scheduled in each of the 10 Federal regions during 1970 and 1971. Their primary purpose was to motivate community colleges, which in some instances have skills center relationships and an interest in manpower training development, to work more closely with all manpower programs in expanding training in the environmental field. Also highlighted were some of the barriers to expanding training and employment in the environmental area and accommodating the individuals who complete training in the field. As a result of bringing community college staffs, State and local education administrators, and related Federal agencies together, many additional programs in the environmental-ecological education field were established in 1971.

A national workshop was held to train environmental manpower planners and training personnel. A great number of on-the-job training subcontracts with the Environmental Protection Agency were active in several States preparing persons for jobs in the waste water treatment field. Other programs in this area have been established in special service units of government such as sanitation boards, sewage treatment districts, water treatment plants, as well as in the environmental health field.

Other programs developed and carried on during the year involving innovative approaches for special target groups or approaches for possible replication include:

- A program to stimulate the involvement of youth in the mainstream of community life and to help them create and develop their own unique and innovative programs of occupational training and education;
- Priority programs for returning Vietnam veterans;
- A nationwide auto emission control training program covering a 34-State area;
- Substantially enlarged support of the Opportunities Industrialization Centers (OIC's) as a significant training component in dealing with the special education and training needs of minorities;
- A food service program to train persons for jobs in local schools that are stimulated by the Administration's school lunch program;
- A cooperative venture of government, business, industry, and private citizens in a program for training in the building skills to be applied in an urban renewal program;
- Special training programs for retraining unemployed aerospace engineers and technicians, using a university consortium; and,
- Expanded MDTA institutional programs in community and junior colleges with the attendant benefit of opportunities for continuing education for disadvantaged youth and adults.

The Administration's career education objective has been given high priority by the U.S. Office of Education in 1971. In a major effort to assure career options to all the Nation's citizens, maximum attention is given to the coordination of all programs administered by the Department of Health, Education, and Welfare (HEW) that prepare or retrain people for employment. Because of its legislative and administrative flexibility, the MDTA institutional program is able to support the Administration's career education goals. The Office of Education is currently reassigning a number of nonprofessionals for training and placement as associate professionals. Supported in part by MDTA, this program is now being broadened to include Federal employees of other Departments. The career education objective was also in mind in the decision to enlarge support of the OIC's during the year. Training and placement evaluation reports indicate that priority must be given to the improvement of the counseling and guidance services in all manpower training programs. With such effective services, there is greater assurance that trainees will have expanded career options and a more effective adaptability to the world of work.

A review of the progress of the institutional training programs over the past decade affords a measure of hope that the manpower, employment, career education, and training needs of the Nation's citizens will be met more effectively in the coming years. Ten years ago the Congress passed the Manpower Development and Training Act of 1962, with the major objective of assisting persons anticipating technological lay-off in making an easy transition to one of several jobs they would hold in a lifetime. Since then, in response to changing economic and social priorities, the MDTA has been amended several times, each time increasing its flexibility and expanding the tools needed to provide maximum employment, education, and training opportunities and supportive services.

In the first amending process in 1963, Congress acknowledged the need for basic education, prevocational experience, and special youth programs. Later in 1965, brief refresher training programs for unemployed professionals were added, as well as the authority to conduct experimental and demonstration programs in the manpower field.

The 1966 amendments stimulated efforts to meet the needs of special groups, such as older workers, women, inmates in correctional institutions, individuals with linguistic problems, Indians, and disadvantaged youth. These same amendments authorized experimental and demonstration training programs under section 251 of the MDTA in order to bring new training programs into correctional institutions and to aid in reducing recidivism. They also authorized physical examinations and minor medical treatment or prostheses for trainees. In 1968, new provisions authorized training and technical assistance for manpower personnel; an upgrading program; and statutory support for manpower training skills centers established by the Office of Education (OE) to meet the multiple education and training needs of disadvantaged trainees.

Certain amendments in 1963, 1965, and 1966 provided greater administrative flexibility for the Secretary of HEW to conduct the required education and training programs by enabling him to use a wider range of education and training agencies and institutions, both public and private.

In 1962, the legislation vested sole institutional training responsibility with the State vocational education agencies, a logical selection considering the occupational training mission of these agencies. However, the urgency and extent of training required soon dictated the need for a wider range of education and training resources. In 1963, the Congress amended the legislation to give the Secretary and the States greater latitude in designating their lead agency to provide institutional training. As a result, a variety of State agencies have been designated prime agencies in the administration of MDTA institutional training including State boards for technical education, Governors' councils, and State boards for junior and community colleges. With the renegotiation of State agreements in 1968, many Governors elected to assume responsibility for their State's MDTA institutional training program.

In 1965 and 1966, other amendments made possible the use of private education and training institutions in the Nation's manpower program, to the end that all qualified public, private, and nonprofit educational agencies are now eligible to conduct manpower institutional programs.

Thus, over the past 10 years, the manpower legislation has been greatly strengthened to increase opportunities throughout the Nation for the unemployed and underemployed by the provision of needed education, training, and support services, as well as by developing a skilled and dedicated cadre of professional manpower administrators and instructors.

So that the momentum gained in the 10 years of operating under the Manpower Development and Training Act of 1962 may not be lost while deliberations on the President's proposed manpower act and other comprehensive manpower bills are proceeding, the Congress extended the MDTA for 1 year—to June 30, 1973—and removed the restriction that prohibited disbursement of funds beyond December 30, 1973. In this way all MDTA training programs, especially those which would have been terminated, proceed with reasonable assurance of completing a full training cycle. This action, supported by both the Department of Labor and the Department of Health, Education, and Welfare, will also permit a thorough discussion of proposed comprehensive manpower legislation while support continues for a basically sound program to train the unemployed and underemployed.

For the past year the MDTA institutional training program has been undergoing an intensive evaluation conducted by private research organizations in addition to the continuing analyses of statistical program data and evaluations conducted by local, State, regional, and national staffs. During 1971, four major interrelated studies were completed and three, designed to give insight into specific elements of the institutional training program, were begun. They are:

- Systems Analysis of MDTA Institutional Training
- Evaluation of Manpower Development and Training Skills Centers
- Evaluation of the Relevance and Quality of Preparation for Employment Under the MDTA Institutional Training Program
- MDTA Outcomes Study
- Evaluation of MDTA in Meeting the Skill Shortage Needs of Employers
- Evaluation of Basic Education in MDTA Institutional Training Programs
- Evaluation of the Individual Referral System of Providing Training

The systems analysis study assessed the various administrative methods and procedures by which institutional training programs are planned and operated. The evaluations of the relevance and quality of institutional training and of the skills centers examined actual training programs and their effectiveness. The MDTA Outcomes Study sought to determine the effect of training on the employment and earnings of trainees. The findings of the system analysis and the evaluative studies indicated that the MDTA institutional training program is well administered and, in most instances, provides effective programs of occupational training for MDTA trainees. Employment and earnings data presented in the outcomes study further supported the findings of the three program studies. Weaknesses affecting program operations were also noted by all studies and joint interagency working groups are attempting to solve some of the problems that have been identified. Summaries of these studies, including major findings and recommendations for program improvement, are included in chapter V.

Some preliminary findings from the skill shortages, basic education, and individual referral studies are also included in chapter V. These studies will not be completed until mid-1972.

The need for continuing manpower institutional training programs is increasing rather than diminishing. Experience gained in the operation of these programs points to the need for expanding and strengthening them as do the results of recently conducted special evaluation studies. The MDTA institutional training program has been able to train and place individuals effectively on jobs in periods of rapid technological and social change, low unemployment, and high unemployment such as in the late 1960's. Persons entering the labor market without job skills, those with language or cultural barriers, those displaced because of obsolete skills, and those working full or part time at poverty wages still make up a far larger number than can be accommodated in manpower training programs. Moreover, shortages of trained manpower still continue in many skilled and technical occupations and changes in technology are increasing the numbers of job opportunities in new areas each day. It is becoming more and more apparent that there is a need for the Nation to provide a permanent and perhaps broader system of occupational training capable of anticipating changing manpower needs, that can serve individuals throughout their lives effectively as they require new skills for their current jobs or for new ones.

II.
the program in profile

TRAINING OPPORTUNITIES

During fiscal year 1971, nearly $336 million in Federal funds[1] was obligated under the Manpower Development and Training Act to provide 206,100 training opportunities. Of this sum, just over $275 million (including allowances) was allocated to provide 144,500 training opportunities for the HEW-administered institutional program, including $11.5 million for 13,000 part-time training opportunities. Over $60 million was allocated to provide 61,600 on-the-job training opportunities.

First-time enrollments during the year totaled 254,800 persons, of whom 155,600 were in the institutional program and 99,200 in on-the-job training (OJT). Both the OJT and the institutional enrollments included trainees who were in continuing MDTA projects authorized in previous fiscal years. Some of the OJT trainees received institutional classroom instruction in addition to training at the job site. More than 135,900 persons completed training during 1971, 90,300 in the institutional program and 45,600 in on-the-job training. Over 77 percent of the graduates secured jobs—73 percent of those who completed the institutional programs and 86 percent of those who completed OJT.

CHARACTERISTICS OF INSTITUTIONAL TRAINEES

Forty-nine percent of the 155,600 institutional trainees had left school before completing the 12th grade. Forty percent were 21 years of age or younger, and 9 percent were 45 or older. Fifty-nine percent were males, 37 percent of whom were veterans of the armed services. White trainees represented 56 percent of the total enrollment; Negroes, 39 percent; and American Indians, Orientals, and other minority races, the remaining 5 percent.

Sixty-three percent of the institutional trainees were poor, and 46 percent came from families whose total income was under $3,000 a year—28 percent having incomes below $2,000 a year. Although only 58 percent of the trainees were identified as the head of their family, 73 percent were the primary family wage earner. Eighty-one percent of the male trainees and 63 percent of the female trainees were the primary wage earners for their families.

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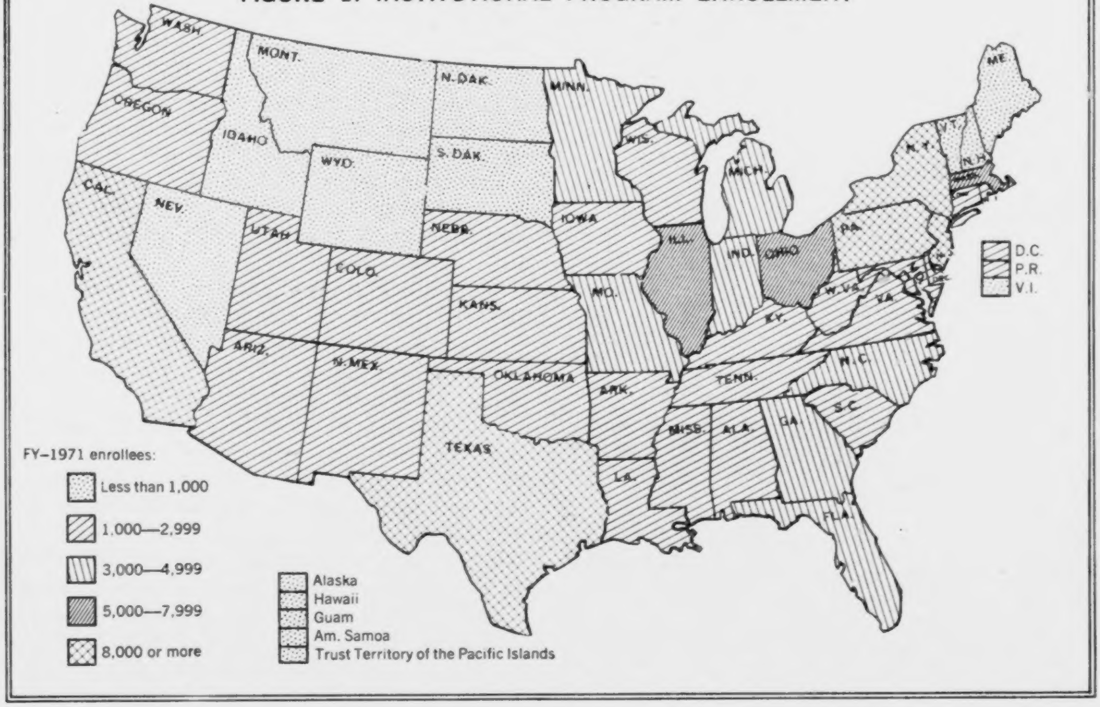
[1] Figures based on data supplied by the U.S. Department of Labor.

FIGURE 1. INSTITUTIONAL PROGRAM ENROLLMENT


WASH.
MONT.
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COLO.
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VA.
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ARIZ.
N. MEX.
OKLAHOMA
ARK.
TENN.
N.C.
S.C.
MISS.
ALA.
GA.
TEXAS
LA.
FLA.
FY–1971 enrollees:
Less than 1,000
1,000—2,999
3,000—4,999
5,000—7,999
8,000 or more
Alaska
Hawaii
Guam
Am. Samoa
Trust Territory of the Pacific Islands

Sixty-six percent of the institutional enrollees were considered "disadvantaged"—poor, without suitable employment, *and* who were either school dropout, members of minorities, under age 22, over age 44, or handicapped (physically or mentally). This is a slight increase over the 65 percent disadvantaged reported for fiscal year 1970. In 1971 as in 1970, skills centers enrolled a greater proportion of disadvantaged trainees (75 percent) than the institutional training program. A greater proportion of the women were disadvantaged (71 percent) than the men (63 percent). Fewer white trainees (58 percent of the white enrollment) were disadvantaged than were Negro (77 percent) or trainees of other races (77 percent).

The policy of requiring an enrollment of two-thirds "disadvantaged," in effect since 1968, has brought to institutional training programs the numerous and complicated problems of these men and women. Since that time the percentage of disadvantaged trainees enrolled in the program has remained fairly constant between 65 and 67 percent. Many institutional training programs, recognizing that traditional or existing education and training mechanisms cannot deal with the problems of the disadvantaged, developed channels of community support or coordinated services with other government or private programs. For example, health services, counseling, legal assistance, emergency financial aid, the provision of food and clothing have been part of institutional training programs when trainees have needed these services to complete their training successfully. Many times these special services are provided at no cost to the program.

Education: Nearly half (49 percent) of the trainees in the institutional program in fiscal year 1971 were school dropouts. Over 5 percent had not finished grade school, 7 percent had stayed in school through the 8th grade, and 36 percent were high school dropouts. School dropouts accounted for 32 percent of the persons in the 1971 civilian labor force, of whom 17 percent were high school dropouts. Although most MDTA trainees have been school dropouts, enrollments during the past 3 years show an increased number of high school graduates, reflecting perhaps changes in the educational level of the civilian labor force and in the rates of unemployment. In 1968, 40 percent of those enrolled in institutional training had a high school diploma; in 1969, 42 percent; in 1970, 47 percent; and, in 1971, just over half (51 percent) were high school graduates.

FIGURE 2. INCREASE IN LEVEL OF EDUCATIONAL ATTAINMENT, 1968–1971

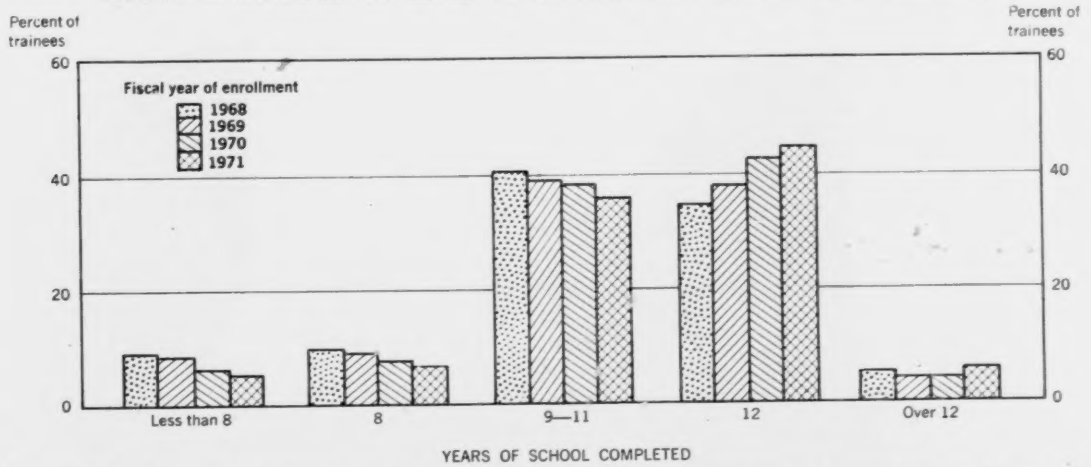


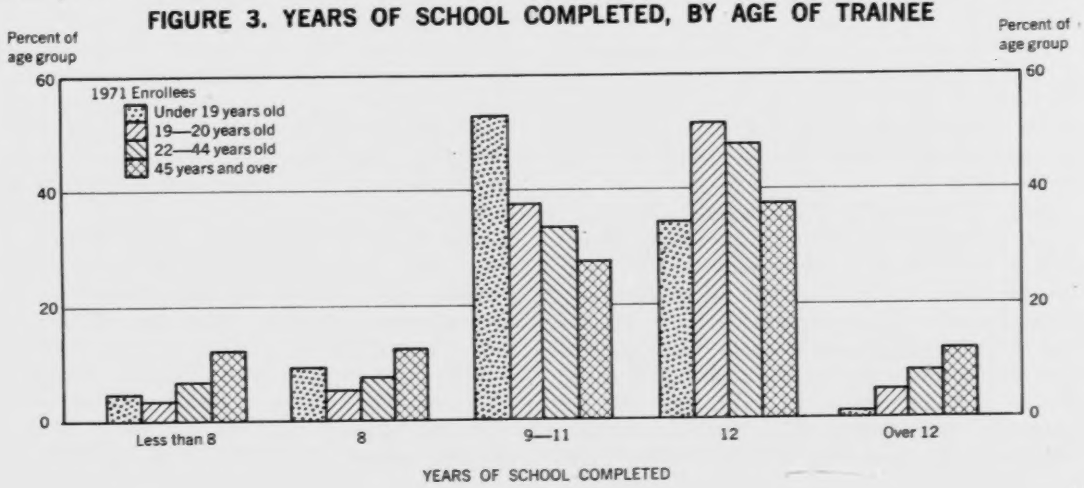
TABLE 1. Trainees Completing 12 or More Years of School, by Race

(Percentage distribution)

Trainees	FY-70	FY-71
All institutional	46.7	51.4
Oriental	52.1	63.0
Caucasian	47.8	53.3
Negro	45.8	51.4
Other races	34.7	43.2
American Indian	33.5	37.4

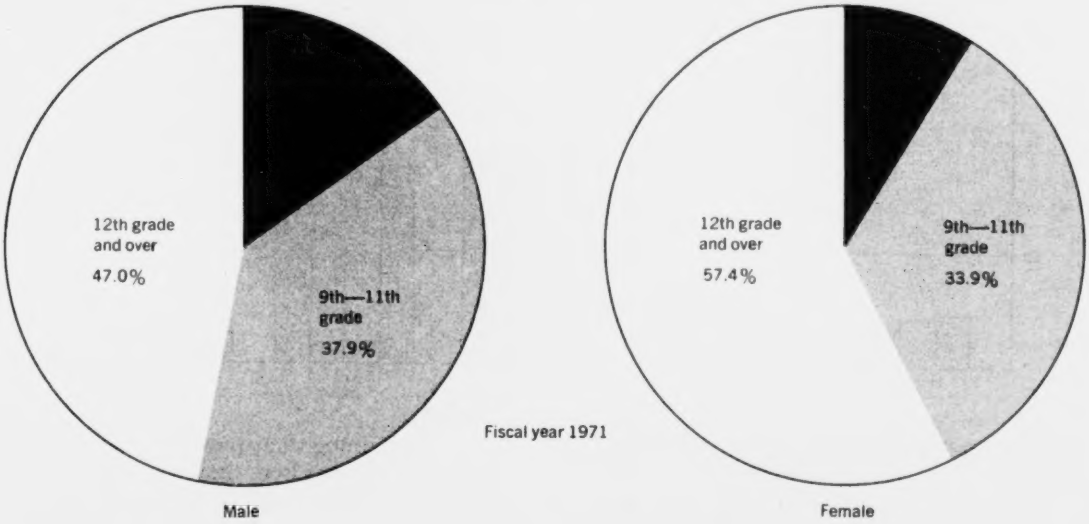
A higher educational level was recorded in fiscal year 1971 for each racial group, with the groups maintaining their previous ranking order —American Indians were the least well educated and Orientals had completed the most years of school. More than 54 percent of the trainees in the prime labor force age group, 22 to 45 years of age, had completed high school, including over 7 percent who had continued beyond the 12th grade. Nearly 12 percent of those trainees 45 years of age or older had completed more than 12 years of school, but just over half (51 percent) in that age group had dropped out of school during high school or in earlier years, bringing down the average level for the group.

FIGURE 3. YEARS OF SCHOOL COMPLETED, BY AGE OF TRAINEE



As is true for the civilian labor force in general and for MDTA institutional training programs trainees in previous years, women trainees reported more years of school completed than men trainees. In 1971, 57 percent of the women trainees had finished high school or gone beyond the 12th grade; only 47 percent of the men had completed 12 years or more of school.

FIGURE 4. WOMEN TRAINEES STAYED IN SCHOOL LONGER



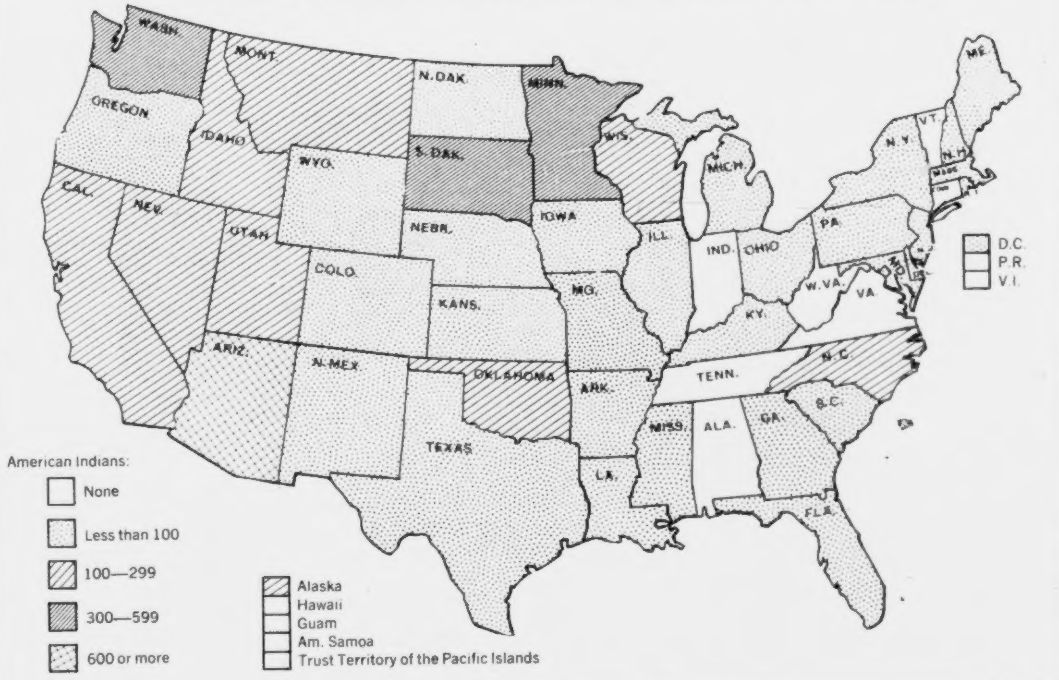
YEARS OF SCHOOL COMPLETED

Age: The proportion of trainees 35 and older was 31 percent in 1963; 25 percent in 1965; 26 percent in 1966, 1967, 1968; 24 percent in 1969; 21 percent in 1970; and 20 percent in 1971. The proportion of youth under 19 increased in 1971 to 14 percent from 9 percent of the enrollees in 1970. The 19-34 age group still account for the majority of the trainees, 66 percent in 1971.

Race: In 1971, as in 1970, more detailed data are available on the race of the trainees. In the first year of the program in 1963, over three-fourths of the trainees were white. Their proportion among the trainees steadily decreased until 1968 when they comprised about half the trainees (51 percent). Their number increased in the following 3 years and represented 56 percent in 1971. Prior to 1970, only "Negro" was identified as a category within the "other" segment, and this group represented 92 to 94 percent of the minority race trainees. Their proportion within the minority races dropped to 88 percent and 89 percent in 1970 and 1971 respectively. Beginning in 1970, American Indians and Orientals were identified as "other," and represented just over 3 percent of the total enrollment for each year. In 1971, American Indians comprised 2.7 percent and Orientals 0.4 percent of the individuals enrolled in training programs. Other minority races comprised 2 percent of the enrollees for that year. Minority races (Negro and others) compose less than 20 percent of the civilian labor force but more than 44 percent of the MDTA trainees, reflecting their higher rate of unemployment—averaging twice that of the white civilian labor force.

Spanish-Surnamed Persons: More than 10 million Spanish Americans were counted in the 1970 census of population; they constitute the second largest minority group in the Nation. Almost 20,000 (12.8 percent) of all MDTA institutional trainees enrolled during 1971 were persons with Spanish surnames. Over half (52 percent) were Mexican Americans, 22 percent were Puerto Ricans, and 26 percent included Cubans and others with Spanish surnames. More of the Spanish-surnamed trainees were male (62 percent) than the percentage of male trainees among all institutional enrollees (59

FIGURE 5. NUMBER OF AMERICAN INDIAN TRAINEES AMONG FISCAL YEAR 1971 ENROLLEES


WASH.
MONT.
N. DAK.
MINN.
ME.
OREGON
IDAHO
WYO.
S. DAK.
WIS.
VT.
N.Y.
N.H.
MASS.
MICH.
CAL.
NEV.
UTAH
NEBR.
IOWA
ILL.
IND.
OHIO
PA.
COLO.
KANS.
MO.
W. VA.
VA.
KY.
D.C.
P.R.
V.I.
ARIZ.
N. MEX.
OKLAHOMA
ARK.
TENN.
N.C.
S.C.
MISS.
ALA.
GA.
TEXAS
LA.
FLA.
American Indians:
None
Less than 100
100—299
300—599
600 or more
Alaska
Hawaii
Guam
Am. Samoa
Trust Territory of the Pacific Islands

percent). Almost 72 percent of the Puerto Ricans were male, the group with the highest concentration of male trainees.

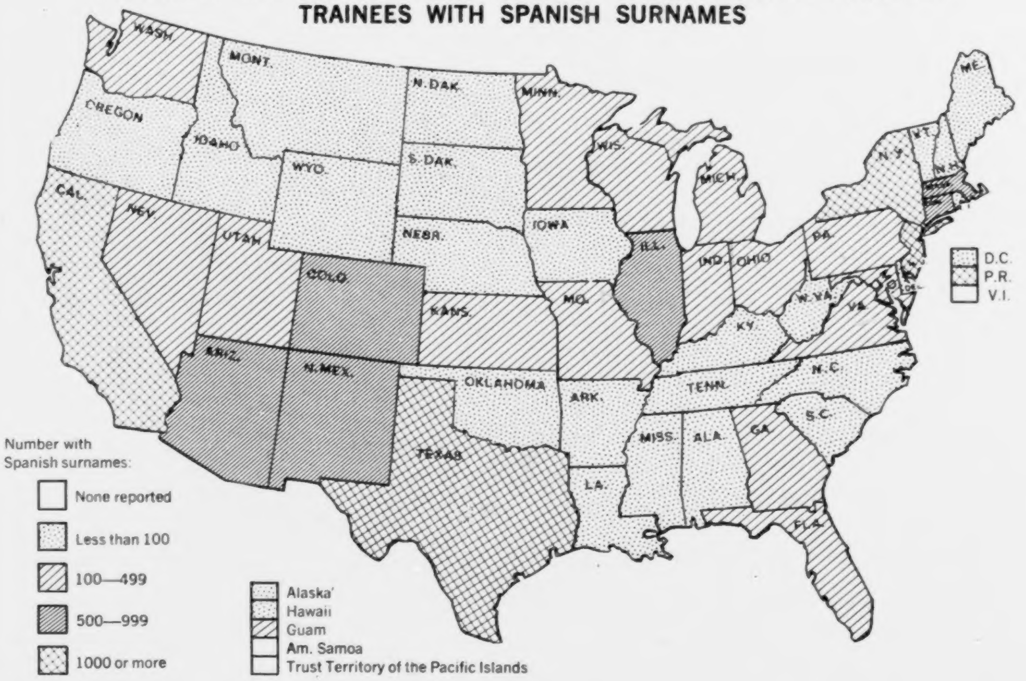
The Spanish-surnamed trainee generally brings with him to the training situation inadequate facility in English and at times with his mother tongue. He has problems associated with poverty and discrimination: generally, these are poor health, a strong feeling of being discriminated against, a lack of inexpensive transportation, poor housing, poor credit, a high percentage with police records, etc. His vocational background is primarily agricultural or rural oriented, and, if he is an urban dweller, in unskilled trades and services. The disadvantaged Spanish-American is subject to seasonal lay-offs and other sporadic employment conditions. Spanish-surnamed trainees are located predominantly in the Western and Southwestern States, although there is no State without a Spanish-American population. Other locations with large numbers of Spanish-surnamed trainees are in the Northeastern United States and Florida.

Persons with Spanish surnames are listed as a minority in the U.S. Department of Labor Manpower Administration's definition as "disadvantaged." Over 80 percent of the Spanish-surnamed institutional trainees in fiscal year 1971 were disadvantaged; 76 percent were poor. Fifty-eight percent were heads of families while 75 percent were the primary wage earners. Ninety percent of the Spanish-surnamed trainees were unemployed or underemployed, and 44 percent had been unemployed between 27 and 52 weeks the year before entering training. Over 63 percent were school dropouts, 38 percent having dropped out during their high school years. Essentially a young group, 83 percent were under 35 years of age; 42 percent, 21 years or younger. Over 86 percent were eligible for allowances.

OCCUPATIONS OF TRAINING

Since 1962 institutional training has been offered in over 600 different occupational skills. The offerings vary in response to new employment opportunities and local needs. The demand for health workers (nurses, technicians,

FIGURE 6. NUMBER OF FISCAL YEAR 1971 INSTITUTIONAL PROGRAM TRAINEES WITH SPANISH SURNAMES


WASH.
MONT.
N. DAK.
MINN.
ME.
OREGON
IDAHO
WYO.
S. DAK.
WIS.
MICH.
N.Y.
VT.
N.H.
CAL.
NEV.
UTAH
COLO.
NEBR.
IOWA
ILL.
IND.
OHIO
PA.
KANS.
MO.
KY.
W. VA.
VA.
ARIZ.
N. MEX.
OKLAHOMA
ARK.
TENN.
N.C.
S.C.
MISS.
ALA.
GA.
TEXAS
LA.
FLA.
D.C.
P.R.
V.I.
Number with Spanish surnames:
None reported
Less than 100
100—499
500—999
1000 or more
Alaska
Hawaii
Guam
Am. Samoa
Trust Territory of the Pacific Islands

medical assistants), office workers (stenographers and machine operators), persons in food preparation, mechanics, machinery repairmen, and construction workers seems endless. The many skills taught in institutional training programs are classified into nine major occupational categories in the 1965 *Dictionary of Occupational Titles.*

Since 1962, the largest number of trainees, 22 percent of the total, have been trained in clerical and sales skills. Eighty-seven percent of this group were women, most being trained in the various office skills. Enrollees in clerical and sales accounted for half (49 percent) of the women enrolled in skill training. Women also represented the largest segment in the highly skilled group of occupations within the professional, technical, and managerial category (61 percent), accounting for 27 percent of the women trainees. Most of their skill training was for the health occupations—registered nurse refresher training, licensed practical nurse, and technicians and therapists. The service category was the only other one with a large number of women. Some were being trained as cooks and in related food service skills, but most were being trained as nurse aides and for hospital service work. These three major occupational categories accounted for 97 percent of all the women trainees.

Sixty-four percent of the men were in two occupational groups. Training in machine trade occupations accounted for 30 percent of the men, and 34 percent were in training for structural work occupations. An additional 11 percent of the men were in professional, technical, and managerial occupations, largely as engineering draftsmen and in occupations in medicine and health.

Nearly half (48 percent) of the trainees considered underemployed at the time they entered training were in the professional and clerical groups, presumably in refresher training and to upgrade their current skill. Eighty-two percent of the underemployed women were in these two groups.

The age of the trainee seemed to have little relationship to the occupation of training. Fifty-six percent of all the trainees for whom the occupation of training was reported were between 21 and 45 years of age at the time of enrollment, 35 percent were 21 or younger, and 9 percent were 45 or older. The percentage of trainees in the three age groups within each occupational category ranged close to their percentage in the total group. The women in each age group were concentrated in the same three occupational categories as they were in the total of all ages—professional, clerical, and service occupations—and the men were concentrated in the machine trades and structural work groups as mentioned earlier.

The amount of education trainees had before entering training did have an influence on the selection of occupation of training. While 57 percent of those trainees selecting an occupation had completed 12 or more years of school, 74 percent of the trainees in the professional category and 69 percent of those in the clerical and sales category had a 12th-grade education or better. Forty-eight percent of all the trainees with a high school or better education were in these two occupational categories. Almost 52 percent of the trainees with less than an 8th-grade education were in the machine trades (22.7 percent) and structural work (28.9 percent) categories and an additional 15 percent in service occupations. Trainees who dropped out of school during the high school years were concentrated in the machine trades and structural work categories (48 percent), with 16 percent in the service area. An additional 17 percent of the high school dropouts were in training to acquire clerical and sales skills. For more detail see the statistical tables in appendix C.

Male veterans of the armed forces enrolled in institutional programs were being trained in a wide range of occupational skills. Thirty-seven percent of all male trainees were armed forces veterans. Over 10 percent were in professional and technical occupations, about half of them as architectural and engineering draftsmen, and a sixth in the medical and health occupations. As was true of all men in institutional programs, over 60 percent were training for occupations within the major categories of machine trades and structural work. Two-thirds of those in machine trades skill training were in occupations in mechanical repairing, most in motor vehicle repairing plus those in aircraft, marine, farm machinery, and engine and power transmission mechanics. Those in structural work skills were training to become welders, construction-work carpenters, brick layers, plumbers, metal fabricaters, riveters, and transportation equipment bodymen.

INSTITUTIONAL TRAINING PROGRAMS

Institutional training under the Manpower Development and Training Act is arranged in a number of ways. Projects may offer training for a specific skill on a one-time basis to meet a specific national or local need. Multioccupational projects offer basic education, support services, and training programs in several occupations in a central facility. Cooperative occupational training and coupled training projects are developed in a work setting where institutional training and guidance are coupled with actual work at the job site. Individual referral projects, which are planned to serve a limited number of trainees who are referred to ongoing programs, broaden the range of occupations in which trainees may be enrolled. Part-time and upgrading projects assist those individuals who need to upgrade and refresh their skills. Thus, the MDTA institutional training program is characterized by maximum flexibility in which a great variety of training arrangements, suited to the particular needs of the trainees, are employed. The basic mechanisms for implementing education and training programs, which are authorized by the act, include those arranged by agreements with State agencies and those which the Secretary of Health, Education, and Welfare arranges nationally.

STATE PROGRAMS

Arrangements for training through the States are made by the Secretary of Health, Education, and Welfare by agreement between the Commissioner of Education and the State, usually through the State's education agency. Under the agreement, the State develops training programs for occupations that are identified as offering opportunity for employment by the State employment service. In fiscal year 1971 over 1,600 institutional training projects were developed and funded by the States. These were designed to provide training to more than 144,000 individuals. Each State develops an annual program plan which also becomes part of the Cooperative Area Manpower Planning System (CAMPS) that forms the basis for individual training projects. Actual training arrangements vary, depending on the nature of occupational training to be provided and the needs of the trainee. In addition to skills training, most programs include basic education or remedial education, supportive services, and counseling. Almost all institutional manpower training is full-time, with the goal of 40 hours a week of direct skill training and related educational experiences.

NATIONAL PROGRAMS

The Manpower Development and Training Act provides that 20 percent of all funds appropriated for parts A and B of title II may be used for carrying out a variety of special programs generated through initiatives of the Secretary of Labor and the Secretary of Health, Education, and Welfare. Such programs may be operated through public and private institutions and agencies, including community groups. During fiscal year 1971, 72 new contracts were developed to train over 38,600 individuals at an estimated cost of $21.6 million. National contract programs were operated in all States, the District of Columbia, and Puerto Rico.

National programs are designed to help meet manpower needs in unexplored occupational areas (environmental control, community organization, and so forth) when national priorities emerge. Often these programs represent unusual but promising ideas and methods for training. Training may be offered in a single occupation for a few trainees or it may be a more ambitious multioccupational program combined with a variety of satellite and support services designed to train several thousand trainees. In arranging for these, funds may be provided directly to the States to carry out the program or they may be provided to a contractor to explore new training methods and resources that a State may be unable to accomplish because of legislative or administrative restrictions. National program funds have also been used extensively to offer identical programs through a single sponsor in several States.

National manpower development and training (MDT) programs function in three main areas:

Experimental and demonstration projects are designed to develop and test potentially useful innovations in instructional methods, equipment and training facilities, and to explore new occupational areas in which manpower training may be provided. They may be used to test innovative curriculum and counseling approaches; develop operational examples and guides for use by other manpower programs or other agencies; or develop linkages with other agencies and organizations. Although the main thrust is toward the relatively unexplored areas of training, there is equal stress on preparing the trainees for rewarding work, the primary purpose of the programs authorized by the MDTA. The experimental nature and purpose of these programs require that the number of trainees be kept small. These programs are reviewed and observed on a periodic basis.

Coupled training programs comprise a second area and encompass several thousand trainees. These programs combine institutional training with supplemental or related education in a classroom setting and on-the-job training (OJT). They may cover many States in a single occupation or occupational area. Contractors are often unions and industry associations. Recently more emphasis has been directed at enrolling minority group members and veterans as trainees. The Department of Labor is responsible for arranging the on-the-job training portion of these programs.

National institutional training projects are instituted when a State finds it cannot provide training and related services in a particular occupation or for a particular group of trainees, or where a single program is to be operated in more than one State.

TRAINING INSTITUTIONS

The mainstay of the institutional training program has been the single-skill project and the multioccupational training program. The single-skill project offers training to a class-sized group in one occupation for a given length of time which may or may not be repeated depending on the needs of the labor market area. More than 1,400 single occupation institutional training programs were developed and funded during fiscal year 1971. The multioccupations project offers several occupations for training, thereby affording greater choice to the trainee and consolidating administrative and facility costs.

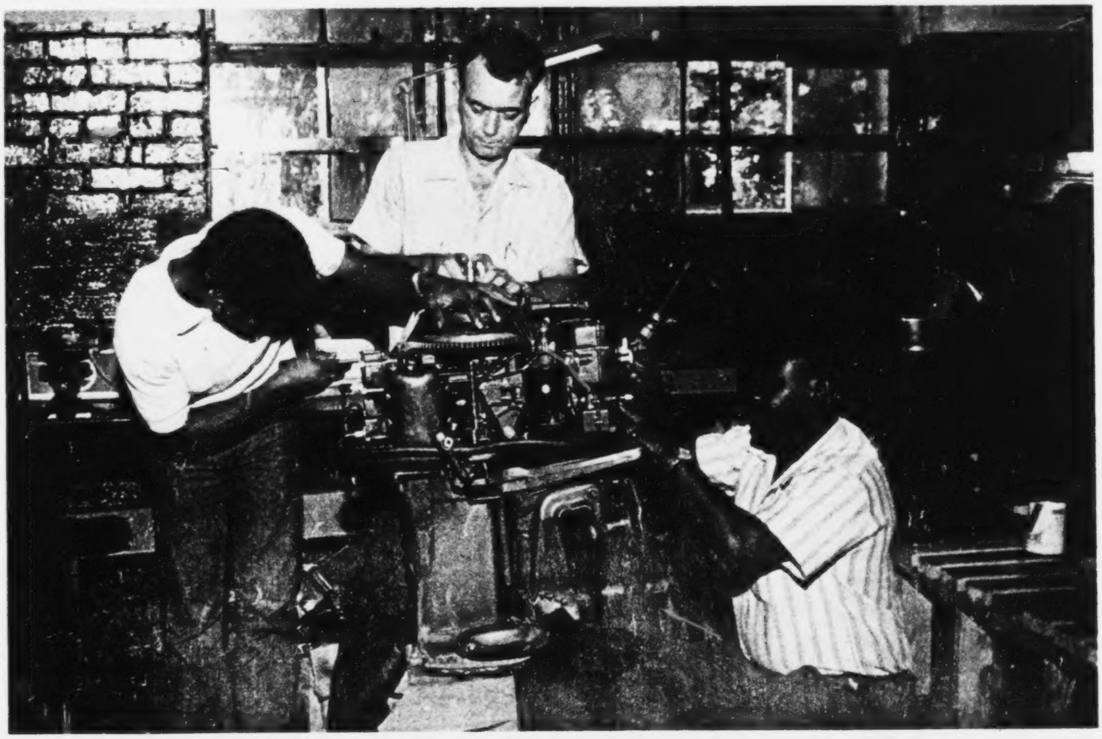
A number of different training facilities are in use throughout the MDTA program to house the various training projects that have been developed. In the State of Texas, for example, institutional training programs in 1971 were developed and funded in 31 public secondary schools, 13 junior colleges, 4 colleges and universities, 4 private schools, 3 technical institutes, 1 State agency, 1 hospital, 1 correctional institution, and 1 nonprofit organization. In addition, training was arranged with 150 nonpublic schools for individuals where the job market demand or type of skill did not warrant establishing class-sized groups.

Projects may be found sharing space in an area vocational school, a community college, or a private school. Training projects may occupy their own facility as is the case for most skills centers, Opportunities Industrialization Centers (OIC's), and large multioccupational training projects. These facilities are usually rented. They may, in the case of unused schools, represent in-kind matching provided by the State. Several facilities, such as the Minneapolis Skills Center, are Federal buildings for which the MDTA program has obtained a special permit to use.

SKILLS CENTERS

Manpower development and training skills centers have established themselves as institutions especially suited to provide the education and training programs that are mandated by the act. During 1971 the number of skills centers increased from 67 to 80. Several States have more than one skills center. In 1971 centers were established in Wilmington, Del., Atlanta, Ga., Little Rock, Ark., and Seattle, Wash.

The major advantage of training in a skills center is the flexibility it can offer. Much of this flexibility results from the size of the centers and the recognition that MDTA and the Departments of Health, Education, and Welfare and of Labor have given to the centers' programs. Centers are able to provide a wide variety of occupational offerings to trainees as well as expanded remedial and supportive services. Consequently they are more likely to enroll a larger number of disadvantaged trainees. Centers have also been used as a testing ground for new approaches in instruction and administration, including annualization of program planning, base funding and procedures such as the development of occupational clusters and open-



MDTA trainees learn how to repair outboard motors for a growing recreational America in the Birmingham, Ala., Skills Center.

entry/open-exit schedulings, and buy-ins. Both Departments are continuing work to improve the instruction and services that skills centers offer to their trainees. Many of the innovative programs described in this report are conducted by skills centers. Chapter V discusses the report on the skills center evaluation, completed in 1971 by the Olympus Research Corporation.

A tabulation of the records of over 27,000 skills center trainees shows that a larger proportion of these trainees were disadvantaged than all institutional trainees—more were poor and unemployed, and fewer were employed or underemployed. A considerably larger proportion of skills center trainees were school dropouts and were Negro. A slightly larger number of them were receiving public assistance or unemployment insurance payments when they enrolled in training, and many more qualified to receive allowances while in training. In other characteristics—age, handicapped, veteran status, sex, length of employment, and duration of unemployment—trainees enrolled in the skills centers differed little from the rest of the institutional trainees.

TABLE 2. Characteristics of Skills Center Trainees and Those of the Total Institutional Training Program

Characteristic	FY-71 Percentage of enrollees	
	Skills center	Total institutional
Disadvantaged	75	66
Poor	72	63
Unemployed	86	73
Underemployed	10	14
Employed	2	8
Dropouts	57	49
Negro	52	39
Public assistance recipients	18	16
Unemployment Insurance claimant	11	10
Eligible for allowances	96	80

The educational concept of "open endedness," or *open-entry/open-exit*, is followed in skills centers as well as in other institutional programs and training facilities. Briefly, this concept involves enrolling the trainee when he finds he needs training. At the time of enrollment a study is made of the trainee's education and employment history, plus an extensive interview to determine his current achievement level and potential. The trainee's program is designed to fit his accomplishments, needs, and capabilities. He proceeds at his own pace and is committed to a pace consonant with his abilities and personal goals. The trainee though must meet acceptable criteria before he is certified for competency at a given level in an occupation. There is no arbitrary, preset schedule. The benefits are truly significant for all trainees. This kind of individual scheduling is particularly valuable for the many disadvantaged whose problems (health, finances, and the like) at times interfere with continuing a more orthodox training schedule. It is also valuable for upgrading and for cluster training.

Organizing occupational training programs using *skills clusters* has added flexibility to the MDTA institutional training program. This method has been generally adopted in skills centers and in large multioccupational training projects. In general, these cluster-group occupations are related educationally or industrially, either at about the same skill level or in a skill-ladder sequence, to allow the trainee to progress as far as he is able. The trainee is first introduced to the basic core content of the program, common to several skills in the cluster, which gives him broader familiarity with the field than he could readily obtain otherwise. He then moves to special units of instruction, which teach those skills directly related to employment at either a specialized exit level or at an occupational level, depending on his desires and capabilities.

The development of skills clusters requires specialized curriculum and materials as well as training of instructors in their purpose and use. At each step in the training process, the trainee's efforts must be carefully evaluated to determine his readiness to move on to the next step. Aside from performance tests administered by the instructor, trainee evaluation includes extensive counseling services by the counseling staff of the training program. Thus far the most prevalent occupations that are developed in clusters have been automotive, which includes such skills as service station attendant, front end man, tune-up man, auto mechanic, auto body and fender repairman, diesel mechanic; and clerical, which includes general clerk, file clerk, keypunch operator, clerk typist, stenographer, and secretary. With the successful development of training clusters in the automotive and clerical occupations, which incorporate some of the more prevalent occupational programs offered in institutional training, many programs are now developing clusters in other occupations such as health and electronics.

A recent approach to training combines preparations for the highest attainable level of occupational training for the individual within the scope of the MDTA, plus a *career ladder* structuring of training and counseling. This approach recognizes that many MDTA graduates will not stick with low-level jobs that offer no opportunity for upward movement. There is a definite but slow trend away from dead-end jobs, especially in light of persons having qualifications and promising capabilities for higher level positions.

Most MDTA institutional programs are undergirded by a well-organized program of *supportive and remedial services* available particularly to the disadvantaged person to insure successful progress through training. The integration and coordination of such services should become a functional part of institutional training programs. Earlier program failures and special Government studies have shown that most of the disadvantaged learned quicker, easier, retained more, and were better able to use what was learned after exposure to nonskill or academic subjects. For example, to persons lacking adequate arithmetic abilities, successful training as a machinist, and subsequent job placement is unrealistic until the trainee receives supplemental training in using and applying numbers to a ruler or micrometer. When such training is directly job-oriented, with immediate applicability, many trainees who formerly avoided education become avid learners.

Illness, child-care problems, legal problems, financial problems, personal and emotional difficulties, undetected sight and hearing problems are some of the difficulties trainees bring to the training program. Many times, the magnitude of these problems is such that the trainee's progress is retarded or he is forced to drop out of training. Usually it is the counselor who is responsible for the development of a comprehensive supportive service program. All skills centers and most large multioccupations training projects have well-developed programs using community resources to assist trainees. Linkage with vocational rehabilitation agencies which provide physical examinations and correct medical problems, is one of the most frequently made arrangements. At the Detroit Skills Center, physical examinations provided by the vocational rehabilitation agency are also used to detect drug users among the potential trainees. Through cooperative efforts with the counseling staff and one of several drug treatment clinics in the city, drug users are offered the opportunity to enroll in a drug treatment program at a clinic and at the skills center for training, which also provides continuing counseling and guidance sessions for those undergoing treatment.

OPPORTUNITIES INDUSTRIALIZATION CENTERS

The Opportunities Industrialization Centers (OIC's) have been an important national training resource within MDTA over the past several years, as they have continued to serve disadvantaged population groups—whites, Negroes, Chicanos, American Indians, and Puerto Ricans—in their communities. The program is designed to meet the needs of special groups of adults who have either been rejected by or have themselves rejected the traditional education and work system. OIC programs are principally designed to reach public school dropouts, the "hardcore" unemployed, the poor, and the unmotivated—men and women ranging in age from 18 to 60. On the average, their educational achievement level is usually within the 5th- to 8th-grade range. Many are, in fact, functionally illiterate.

A distinguishing feature of the continuing OIC program is the emphasis on developing self-pride and self-motivation. The OIC's also emphasize attitudinal change as well as skills training, both of which are equally important for short- and long-term success. The program's participants, staff, trainees, boards of directors, advisory committees, and participating businessmen get a feeling of involvement and belonging to "their" program. The phenomenon of success prevails because of the feeling of self-help. This becomes the bond which carries over to the work situation, making adjustment easier for the disadvantaged.

A great deal of the success of this community-based, self-help program depends, too, upon the involvement of the community—the people, labor organizations, business and industry, banks, philanthropic organizations, neighborhood groups, and government agencies.

COMMUNITY COLLEGES AND INSTITUTIONAL TRAINING

The involvement of community and junior colleges in the MDTA institutional program indicates that they may be particularly suited to deliver, on an increased selective basis, the education and training services needed by MDT clientele. The unique contribution of community colleges to the MDTA program is the total integration of trainees into an established educational institution for adults, while providing any needed remediation. Although an increasing number of community and junior colleges have been involved in the program, these are relatively few considering the growing number of these institutions in the United States. A nationwide study was initiated in 1971 by the American Association of Junior Colleges to determine the extent of community and junior college involvement in the program, the barriers facing such institutions in developing programs, the advantages of using this type of delivery system, and the types of educational components needed for effective manpower training. The study is scheduled for completion in 1972, and its findings will be detailed in the next Report of the Secretary of HEW to the Congress on the MDTA.

Several States have well-established relationships with community colleges. During 1971, Michigan used 18 percent of its MDTA institutional training money for training programs in community colleges. Now in its third year, the Denver Community College in Colorado serves as the facility for a designated manpower training skills center as does the Portland Community College in Oregon. In some States the State board for community colleges serves as the administering agency for institutional training programs.

In addition to these continuing relationships with community colleges, many States have developed specific training programs with them. For example, in a venture combining several institutional training features, the Southern Branch of the Delaware Technical and Community College has trained 40 heavy equipment operators, 60 heavy construction equipment

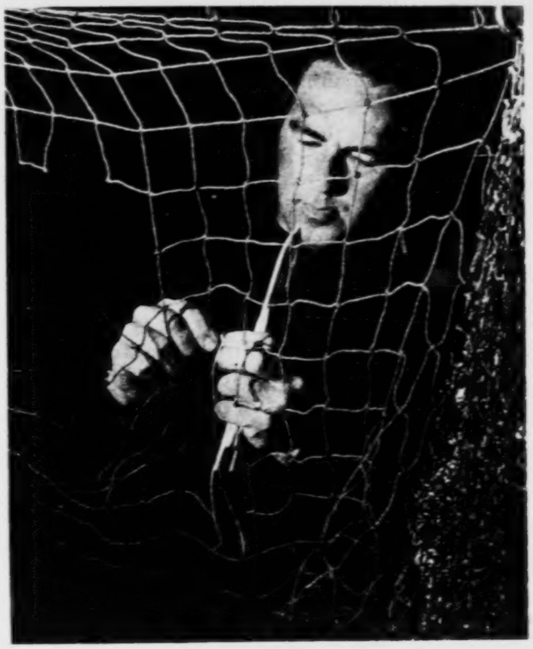
Community college training for rug making. The tufting machine requires precise, careful knowledge and handling.

truck drivers, and 20 heavy construction equipment mechanics. This multioccupational program was directed under the MDTA provisions for training persons in Redevelopment Area Resident (RAR) projects.

In developing this program, the community college in Delaware cooperated with the Community Action Agency, the County Inter-Agency Committee, the State CAMPS Committee, and local business and industry. The educational cost was low since the heavy equipment was donated by businesses or obtained through the Federal excess property program. Much of this equipment was repaired and maintained by the trainees as part of the program's activities. This same community college used RAR funds to train 20 women for jobs in a rug factory. All trainees were immediately hired. Both RAR projects were possible through the imaginative use of the facilities at a former airport.

As part of a coupled training program, the Community College of Baltimore (Md.) provides classroom training and arranges for OJT training in the construction trades for 150 disadvantaged persons. The program is linked with the urban redevelopment program of the U.S. Department of Housing and Urban Development (HUD) and is partially aimed at providing trained personnel for this program. The purpose of the institutional portion, which includes supplementary basic education and vestibule training, is to equip the trainee with motivation, skills, and experience so that later he may advance his career through additional training. This pilot program is a possible prototype for similar training activities to be conducted elsewhere in the country. The community college has also extended full student privileges to the trainees.

A unique MDTA program in net mending and trawl construction was conducted by Southwestern Oregon Community College from January 1971 through May 1971. The course was organized to suit the particular employment patterns of fishermen who are more likely to be ashore for several days at a time during the winter. Training was organized into modular components to allow each trainee to progress at his own pace. Highly individualized and informal instruction resulted in the acquisition of practical skills, which were almost immediately applied to the operation of the Oregon commercial fishing fleet. Great stress was laid upon a tutorial-demonstration system in which a man would undertake a certain step in net mending, practice it under the tutelage of the instructor, and then take the work home with him or aboard the vessel for further practice. All component steps were subject to performance criterion tests, so that the trainee would not proceed to a subsequent step until he and the instructor were convinced that he had thoroughly mastered preceding steps.



The art and skill of net mending helps Oregon fisherman. (Photo by Keith Topping.)

Trainees who were enrolled in the course have been able to increase their productivity both through the correct positioning of their trawls and through the ability to mend their nets on the spot without having to return to port. Captains and fishermen in several ports along the Oregon coast have expressed the desire for similar training to be given in other locations.

PRIVATE SCHOOLS

The Manpower Development and Training Act mandates the use of private schools where such institutions can provide equipment or services not available in public institutions, and where, at comparable cost, they can offer equivalent training, avoid the necessity of setting up a special class, or more quickly reduce unemployment or manpower shortages. In fiscal year 1971, 209 projects were approved for nonpublic institutions to provide training for 12,824 persons. In addition, individual referral projects were developed for over 11,000 trainees. In these latter projects the majority of training took place in private institutions.

Private schools have conducted entire classes for a single occupation, accepted individual trainees referred for training on a statewide basis, provided supplementary classroom training in conjunction with OJT, and conducted experimental and demonstration projects. Training is conducted for a variety of occupations, but with a concentration in the health and clerical fields and higher skilled occupations.

Among the major problems which deter the use of private institutions in the MDTA program are State administrative and legislative barriers, and lack of accreditation policies that make using private institutions by the State departments of education difficult and often necessitate Federal intervention before a given school may be used.

Because of the congressional mandates and the valuable manpower training resource that private institutions constitute, it is likely that the program's involvement with these institutions will continue to grow as it has over the past years.

PART-TIME TRAINING AND INDIVIDUAL REFERRALS

Over 12,000 trainees were enrolled in part-time training during fiscal year 1971. Sixty-six percent of the enrollees in part-time training were unemployed or underemployed. Part-time trainees had a higher level of education—60 percent had 12 years or more of education compared to 51 percent for all institutional trainees. Almost the same proportion in each age group were males, but 48 percent of those enrolled on a part-time basis were veterans of the armed services. Part-time trainees were also older—39 percent were over 34 years of age, 21 percent over 44, and 9 percent over 54. Slightly less than 20 percent of all institutional trainees were over 34 years of age.

Part-time institutional training is used most frequently to upgrade, refresh, or broaden existing skills, to prevent obsolescence, and to supply training needed to meet changing conditions. Part-time training opportunities have been offered in many fields—for upgrading and refreshing skills in occupations in great demand, such as registered nurses, and medical support skills; for general clerical upgrading; to introduce TV and electrical repairmen to model changes and to new models and new appliances; to add a related skill, such as heliarc welding, to existing welding skills; and to introduce new techniques in answer to changing conditions, such as auto exhaust emission control training for auto mechanics, and antipollution control measures for water and sewage plant operators. Part-time training has also been used to teach English as a second language and for orientation to the "world of work."

The *individual referral* method of arranging training is used by all States to increase the numbers of different occupations in which individuals may enroll. This method is also used when developing a class-sized project is unfeasible, usually because a large number of trainees in a specific occupation are not required by the labor market. Rural areas, too, make frequent use of the individual referral method, since it permits participation in MDTA training for persons who live in sparsely populated areas. In fiscal year 1971, States developed referral projects for training 14,000 trainees compared to 11,000 referred for training on an individual basis in 1970.

The characteristics of trainees enrolled on an individual basis differed in several significant respects from those enrolled in the institutional training program as a whole. Over half (53 percent) of the persons referred to ongoing occupational training courses on an individual basis were women—probably due in large part to the number referred to hospitals and other institutions for training as licensed practical nurses, paramedics, and refresher training for registered nurses. Nearly 68 percent of the individual referrals had a high school diploma compared to 51 percent among all institutional trainees. A larger number of those referred in less than class size groups were white, 71 percent, compared to 56 percent for all institutional trainees. A larger proportion also were poor, heads of family and the primary wage earner. Table B-6 in appendix C contains additional information on the characteristics of individuals enrolled through the individual referral method.

TO START INCUBATOR
CAUTION:

III.
MDTA:
career development

The MDTA institutional programs provide education and training opportunities in those occupations in which an individual can reasonably expect to find employment. A number of programs have been especially developed to provide opportunity for employment and advancement so that an individual may find continuing satisfaction in pursuing a career in his chosen field. During 1971, training and career development efforts in the medical occupations continued as a priority. Special programs were initiated for training in environmental occupations and in the development of minority business enterprises.

MDTA training programs are for the most part designed to meet the needs of the disadvantaged. Within this inclusive term there are many groups which present special education and training problems. For example, the Spanish-speaking usually require training in English as a second language prior to skills training. In fiscal year 1971, 64 special projects were developed to train 5,460 members of minority ethnic groups such as Alaskan natives, Spanish-American Indians, the Spanish-speaking and Spanish-surnamed, and Orientals. Other special groups for whom projects were especially developed included residents of redevelopment areas, veterans, and inmates of correctional institutions.

CAREERS IN THE ENVIRONMENTAL OCCUPATIONS

The Environmental Education Act of 1970 states:

> **. . . "environmental education" means the educational process dealing with man's relationship with his natural and manmade surroundings, and includes the relation of population, pollution, resource allocation and depletion, conservation, transportation, technology, and urban and rural planning to the total human environment.**

The recent, substantial increase in Federal, State, and local investments in pollution control activities requires that this new labor market be viewed as a rapidly emerging manpower field. As political and industrial interest and concern continue to mount in this area, additional opportunities are presented. This means that manpower and training needs in a new technical field have to be evaluated and job requirements and titles established, each varying according to the needs of the employer and geographic region. With the cooperation of State manpower planning personnel and Federal officials, uniform standards and definitions are being developed. A classification of activities within the scope of environmental management is now underway. With the focus on community self-improvement and development, environmental education should improve mental and physical health; open up career ladders that have heretofore been unavailable to individuals in some ethnic, racial, or economic groups; and provide a coordination of efforts through retraining, development of new skills, and the redirection or reorientation of existing training capabilities.

Consistent with the policies of the Administration and recent legislation, many programs developed under the MDTA that are helping in the effort to reduce environmental pollution. A series of environmental manpower administrative "teach-ins," conducted by the Olympus Research Corporation, were sponsored by the Office of Education and the Environmental Protection Agency and were presented in each of the 10 Federal regions. The "teach-ins" presented information regarding current and future manpower training needs in environmental occupations to representatives of education, labor, and environmental agencies at the local, State and Federal levels. Another purpose of the "teach-ins" was to get community colleges to work more closely with Federal manpower programs in providing programs in environmental control. These "teach-ins" proved to be very helpful and informative to participants and also created a better overall working relationship between training personnel and local employment service offices.

Several national programs that included sections for upgrading training under MDTA in the waste water treatment field were developed in 1971 and have proved successful enough to warrant the negotiation of new expanded contracts. Entry-level training is still continuing in this important environmental field.

Since waste water treatment plants are continually growing larger and becoming more complex in operating procedures, a more highly trained operating staff is needed. The academic instruction is job related and is constantly being redesigned to upgrade skills of unit process operators currently on the job and to establish a base for postsecondary technical courses. Another objective in the continuation of these training projects is to reach more individuals in isolated areas who need the training and jobs.

Thirty-five subcontracts are now in operation in 29 different States for the training of 1,000 persons as waste water treatment plant operators. The cost of this national coupled project runs over $1.3 million and is a cooperative venture between the Departments of Health, Education, and Welfare, and of Labor, and the Environmental Protection Agency. As demonstrated by the high retention rate, trainee motivation is good. There are no "dead end" training positions. Career advancement training is being emphasized as one of the objectives of the program to stimulate employee motivation and increase plant efficiency. Sound entry-level training programs have also been developed for new employees who are needed to staff new plant construction. These trainees are employed prior to acceptance into the training program. Institutional instruction is given in classroom facilities convenient to the trainees, and on-the-job instruction is given in the subcontractors' plant. The trainee's schedule is flexible and varies according to local conditions.

A Project Transition training program in the environmental field began operation in November 1970. This project is an interagency cooperative venture between the Water Quality Agency, the Veterans Administration, the Department of Labor, the Department of Health, Education, and Welfare, and the Department of Defense. Its purpose is to prepare 300 veterans for careers in the waste water treatment industry and assist them in obtaining suitable employment. Classes are conducted in 22-week cycles, with approximately 10 trainees in each class. These classes are now being held at 10 sites in 6 States. They are being held in community colleges or vocational education institutions with a training capability for environmental sciences and technology, especially in the water and waste water field. The classroom instruction is supplemented by a series of plant site visits where the trainee observes and learns practical operations and maintenance. Individuals who have had the opportunity to participate in the course have shown enthusiasm and interest in the program. All who have completed the course have been referred to jobs.

These training programs, now conducted across the Nation, are providing a challenge to the educational administrators and instructors.

Employers and people of participating agencies have had to be educated about the occupations for which the training is designed as well as to establish career ladders in the field and bring some uniformity into the certification standards in this field which vary between States and even between counties.

More than 63,000 trainees in 34 States, Puerto Rico, and the District of Columbia are receiving training to help reduce air pollution under a $1 million auto emissions control program authorized under the MDTA. The program is focused on effective control of exhaust fumes and unburned hydrocarbons from automobiles, which are major sources of air pollution. The program objectives are to make auto mechanics engaged in the repair of motor vehicles more efficient, aware and capable of performing necessary and required services as they pertain to emission control systems. The actual training is short in duration but quite intensive. Special curriculums and teaching materials for the program have been developed with the help of the major auto manufacturers, the Environmental Protection Agency, and an advisory committee of auto mechanics instructors. Four coordinators were hired through the AMIDS program to assist States in developing projects, hiring instructors and training them in the use of the materials to be used in the training program. The Independent Garage Owners Association, American Automobile Association, National Automotive Service Industry Association, and many other service organizations are participating through their local agencies to encourage their members to attend the training program. Many of the training sessions have been conducted in gasoline stations, garages, and auto parts warehouses in addition to schools. This cooperative program with industry and labor has been very fruitful to all agencies. Most of all it is spurring mechanics to further investigate other types of upgrading training. It is hoped that this effort will lead to programs that will help prepare mechanics for licensing requirements, pending legislation in many States.

This emission control program has been the first training that many independent garage owners and mechanics have had in some cases in over 20 years, and they have welcomed the opportunity to participate. The materials that have been developed for this program have been requested by the Army and Navy for use in training their motor pool mechanics. Special training programs are being developed for the military.

VEHICLE
EMISSION
CONTROL
auto mechanics only
FREE CLASS

MDTA's nationwide effort at air pollution control to help raise the quality of our environment.

In a variety of MDT programs, environmental goals are being pursued, either directly related to training or indirectly. A group of students from an MDTA school in Camden, N.J., did its part to help improve the environment by cleaning up one of the city's park areas. Several work sessions were scheduled to get a large park free of accumulated debris. As a symbol of their efforts in this citizenship project to beautify the area, the trainees enlisted the support of instructors and administrators to invite city officials to a special tree-planting ceremony. A silver maple tree was presented in the name of the MDTA trainees to Camden City Parks Director.

Developing water resources and securing equipment to apply irrigation methods learned in an MDTA class in a rural area vocational school in Minnesota increased yields of livestock feed and convinced leading farmers the value of irrigation. It also was an incentive for enrollees to continue training in the vocational school's farm management courses.

In the State of Connecticut all industrial and municipal air inspectors are spending 2 days a week in an upgrading skills program. A specially designed smoke generating machine was constructed to measure the density of pollution. This machine was towed to each training site with instructions provided by the State's health department at no cost. One hundred fifty-seven of these employees have been certified to serve as witnesses in cases where a firm or organization is accused of pollution violation.

The correct procedure in using the form level or transit in surveying and determining elevation is one of the skills the forestry aide must learn. Twenty individuals qualified for entry into occupations relating to forestry after a training period of 26 weeks in a MDTA class in Alabama. Actual experience in the use of forest lands, in tree identification, in land measuring and mapping, and the use of rain gauges and thermometers was included.

A partial solution to the problem of professionals who lost their jobs in aerospace industries and defense related organizations due to contract losses and industry cutbacks is the RETRO (Regional Environmental Training and Research Organization) program. The main objective of RETRO was to help solve the Nation's critical environmental problems by organizing and redirecting the technical talent and experience of professionals to new careers in the environmental field. It was also organized to actively pursue environmental research for the Southeastern United States.

RETRO involves an agreement between the Environmental Protection Agency's Water Quality Office, the Department of Labor, and the Department of Health, Education, and Welfare under the MDTA. More than 1,000 partici-

Forestry training requires teamwork and the use of modern instruments.

pants have benefited from this training in 28 subcontracts carried out in 20 States.

Applicants were tested and interviewed, and enrollment was based on aptitude, personal interests, education, and experience. The program uses coupled on-the-job training. Classroom instruction was provided by one of several institutions of higher learning in Florida, and on-the-job training was provided at the place of employment. Private industry and Government cooperated in trying to place the trained individuals in meaningful jobs in the areas of pollution abatement, inspection enforcement, urban planning, facilities design, research, safety, and medicine.

In order to reflect the needs of both the trainees and prospective career positions, the training programs had to be designed to include varied levels of academic achievement and experience. The success of this project in the period of its existence and the high regard for the training as expressed by some of the participants and employers indicate the necessity for its continuation and use as a national model for other environmental programs.

With increased awareness of our environment and stricter enforcement of antipollution and other legislation designed to protect the environment, many new occupations and career opportunities are emerging. The MDTA program is seeking to identify occupations that are suitable for institutional training and to develop, where necessary, the curriculm materials and teaching aids to provide training in these occupations. Many States want to expand their present programs and others want to branch out into other environmental fields because of the wide range of opportunity offered to individuals who successfully complete such training programs.

CAREERS IN THE MEDICAL OCCUPATIONS

Manpower shortages in the health field continue to exist, and labor economists project that this situation will continue for the foreseeable future. During the past 10 years, approximately 125,000 persons have enrolled in training in health occupations under the act. Most skills centers include some type of training program in a health occupations cluster. Much of the training in health occupations has been for licensed practical nurse or nurses' aide/orderly. There have also been a number of successful programs or refresher training for inactive registered nurses.

MDTA has provided leadership in the past in offering training for practical nurses licensed by waiver so that they could become fully qualified, in upgrading nurses' aides to licensed practical nurses, and in developing teaching materials and new training programs for aides in emerging occupational areas such as geriatric aide, physical therapy aide, and certified laboratory technician. In 1971, efforts in the health field were further broadened to include training programs in such occupations as audiometric technicians, drug addiction technologists, pulmonary laboratory technician, orthopedic assistant, and electromedical equipment technician. The latter must learn physiological functions and norms related to the equipment he is taught to repair.

A successful program for on-the-job training of supportive health personnel in the health industry has been in operation under the MDTA with the International Association of Rehabilitation Facilities, Inc. Training for 500 individuals was carried out in 19 Rehabilitation Research and Training Centers and other health facilities including mental hospitals and facilities for mentally retarded children. This was part of a continuing program of coordinated professional and technical training designed to solve complex problems regarding management of disabling conditions and preparation of the unemployed and underemployed for meaningful employment.

Since the demand is increasing for trained supportive personnel in the health field, such occupations as physical therapy aide, rehabilitation nurses' aide, clerical aide, child care aide, occupational therapy aide, psychiatric aide, and vocational workshop aide were included in the training. Additional occupations were added as needed in particular facilities, and emphasis was placed on occupations offering the most potential for new careers and job mobility. Skills centers were used when basic education skills were necessary for certain trainees.

In most school districts which receive Federal aid, there is a required school nursing service but a lack of qualified personnel. Since basic preparation in diploma degree programs does not provide the in-depth education for competent practitioners in this specialized area, a pilot school nursing MDTA project was estab-

A manpower trainee learns how to assist the ophthalmologist in examining a patient.

lished with the American Association for Health, Physical Education, and Recreation for the training of 50 school nurses. The program was designed to enable nurses with varying backgrounds and experience in different areas to upgrade their professional preparation in school nursing to better serve school-age children and youth, their families, and the community. This included developing skills and knowledge in health counseling, referral, supervision of associate professionals, organization, administration, and coordination of school health services programs, health appraisal and interpretation of the health status of children to the parents, pupils, and medical community, and implementing appropriate health programs. This project has also helped to sharpen the focus on what skill requirements are for school nurses.

A 2-year program established through an interagency agreement with the Staten Island Community College of the City University of New York is training young men and women for careers as orthopedic assistants. The trainees work under the direction of orthopedic surgeons in hospitals, clinics, or private physicians' offices. This program began in September 1971 with 33 students. Seventy percent of the students are former medical corpsmen, with the remainder selected from the unemployed and underemployed of the community. This is the fourth such recognized program to begin training in this field. Thus far, between 40 and 50 students have completed this training and have received certificates of training from the Public Health Service.

Seven hundred and fifty people are being trained in a hospital career development program in such fields as paramedical, dietary, nursing, and housekeeping occupations. This is the institutional training portion of a national coupled on-the-job training program with the American Federation of State, County, and Municipal Employees, AFL-CIO. In participating hospitals in Minnesota, Tennessee, and Michigan, selected employees in dead-end jobs are upgraded to higher level positions.

Another program is in operation to train the socially and economically deprived in useful

Medical technicians in hospitals need to know the techniques of pipetting. These trainees are preparing for their exacting jobs in a Duluth, Minn., training program.

and needed occupational skills in the health area, and to develop new career-type agreements for the placement and continued training of the enrollees who complete the initial institutional portion of the program. A grant for the training of 40 women from the Model Cities target area was awarded to Health Horizons, Inc., of Dayton, Ohio. The principal concept of this program is the work-study method, focusing on incentives which over a period of time will enable the project to become an effective mechanism that will improve health care and increase the growth of professional manpower in the health field. The trainees are taking such courses as pathology, anatomy, basic health, and medical terminology. After 4 months of this preparatory learning, the trainees go into the various hospitals where they work 4 hours a day in such jobs as X-ray technicians, inhalation therapists, unit secretaries, social services, nursing and lab assistants. Five local hospitals have agreed to provide on-the-job training for the participants. The trainees can continue their education while receiving valuable on-the-job training which will eventually place them into professional health careers.

An administration priority to give as much assistance as possible to returning servicemen prompted the establishment of a program with the National Association of Hearing and Speech Agencies for the training of audiometric technicians. These individuals are trained in the broad field of hearing/speech/language services, including the use of various electronic devices to establish valid and reliable audiograms, which represent the patient's hearing quality and level. Employment may be found in a wide variety of settings, such as clinics, public school programs, industrial hearing conservation programs and private medical offices. Starting salaries range from $5,000 to $8,000.

Ninety-eight percent of the graduates of a geriatric aide program in Ohio were placed in jobs. This unique program combined home study and institutional training. Each participant received a tape cassette player and tapes which presented for home practice motivational material, basic education, and orientation to nursing.

Weekly sessions were held with the instructor, and upon completion of this phase, the trainee entered the laboratory and classroom training with constant supervision.

The trainee had ample time to consider whether he or she really wanted to care for the elderly, and the trainee learned effective ways to communicate with the aged. The tape cassette training reduced classroom time required for orienting students to the field, building interest, introducing vocabulary, and establishing a general knowledge of anatomy, health and safety measures, hygiene, nutrition, and common diseases. This type of program with its effective transfer of information resulted in trainees who were highly motivated and better oriented to the job they were preparing to fill.

The position of drug addiction technologist was established in New York City through an MDTA training program. A series of "crisis intervention" centers were set up and drug addiction programs have been implemented in the elementary and junior high schools in District 12 of the Bronx. Several of the trainees in the drug addiction technologist program have become regular members of the staff of this new program. As staff members they are receiving additional special training to complement their training in the associate-professional program.

In Springfield, Mo., a program in medical services occupations for male inmates in the

Federal prison system provides the individual with occupational skills that can be used when he leaves the institution. This training is for such occupations as medical lab technician, radiologic technician, orthopedic appliance and limb technician, surgical technician, and medical housekeeper.

MINORITY BUSINESS ENTERPRISE

Although minority group citizens aged 16 and over presently comprise 10.8 percent of the total population, they own only 3 percent of the Nation's total business units and control less than one-half of 1 percent of the capital investment in business activity. In March 1969, the President issued an Executive order that launched the Minority Business Enterprise Program and created the Office of Minority Business Enterprise (OMBE) in the Department of Commerce. Shortly thereafter, the Office of Education began to assist OMBE in its activities.

Efforts to assess the current status of minority enterprise activity and to strengthen ongoing programs soon revealed a serious weakness in most entrepreneurial development strategies. This missing ingredient was the lack of education and training opportunity for the new or prospective entrepreneur. Business development specialists working at the local level realized that a successful enterprise requires not only a creative individual, a viable idea, and adequate financing, but also a working knowledge of such subjects as accounting, marketing, personnel, advertising, inventory, site location, taxation, and credit, or an ability to arrange for some of these services. Lack of such knowledge and a paucity of training programs helped account for the alarming failure rate among new minority entrepreneurs. Traditional programs offered by university schools of business and other institutions were frequently designed to produce midmanagement personnel, were not relevant to the unique training needs of the entrepreneur, were frequently not offered on an evening or part-time basis, could be expensive, and usually involved unrealistic entrance requirements.

The Office of Education has helped fill this void by using the adaptability of the Manpower Development and Training Act to fund a number of projects in support of the Minority Business Enterprise program. Although the number of such programs is small, each MDTA project has been carefully developed and monitored in order to test different training strategies to serve a varied trainee population ranging from the business development specialist to the new urban entrepreneur or the rural self-employed. This activity represents somewhat of a conceptual and practical departure from traditional programs in that most MDTA projects prepare students for roles as employees rather than as employers or as self-employed individuals. In addition, minority business enterprise programs stress entrepreneurial and management skills in contrast to specific manipulative occupational skills. However, by stimulating the creation of new business ventures which, in turn, will hire new employees, minority business enterprise projects produce a significant economic multiplier effect beyond that created in other projects. Program administrators representing several Federal agencies are hopeful that these projects will provide information on which to base an expanded program of education and training.

One successful project for small businessmen is the Institute of Contracting, conducted by W. Hamilton Groscup, Inc. The institute through a direct contract provides a program of part-time training and technical assistance to upgrade the business skills of new and existing minority building contractors in the Baltimore, Md., area. The institute helps individuals organize small contracting businesses and contracting pools, arranges financing when needed, and acts as a referral agent for subcontracting activities involving the Baltimore Housing Authority. One hundred trainees graduated from the first cycle of this program, and the percentage of minority building contractors with Maryland Home Improvement licenses increased from 50 to 82 percent, while those with State contractor's licenses increased from 13 to 41 percent. The success of trainees was also evident from increased responsibility and raises in wages reported by those who were employees and from reports of expansion of business, including the fact that 69 percent of the independent contractors in the program expanded their business by hiring one or more employees or adding equipment.

Education System Resources Corporation, under contract to the Office of Education, has developed an instructional handbook and 30 case studies on minority entrepreneurship. The case studies describe successful and unsuccessful minority entrepreneurs in Rochester, N.Y., Durham, N.C., and Washington, D.C., and are drawn from a wide variety of retail and service firms. Each case study is approximately 8 to 10 pages in length, highly readable, yet sufficiently detailed to provide the necessary technical information. The instructional handbook organizes the experiences of the case studies in offering advice on financing, accounting, personnel, inventory, marketing, and other topics. Both volumes are published by the U.S. Government Printing Office as a joint venture of the Office of Education and the Department of Commerce in response to an unusually widespread expression of interest.[1] They will be used to provide meaningful entry and upgrading instruction for minority entrepreneurs through a wide range of training agencies including MDTA projects, Office of Minority Business Enterprise (OMBE) affiliates, Small Business Administration (SBA) offices, community development organizations, and schools of business.

The Institute of Minority Business Education (IMBE) at Howard University, Washington, D.C., is offering a nationwide upgrading training program for approximately 100 business development specialists who work with local economic development organizations. The first phase of this program, which is held in Washington, D.C., includes instruction in packaging techniques, feasibility studies, financial planning, business location, marketing, accounting, and related topics. The institute's field staff provides a program of continuing technical assistance to trainees when they return to their jobs. In addition, short term training on specific topics is offered on a regional basis to approximately 200 minority entrepreneurs. Finally, the institute conducts extensive activities collecting, developing, and disseminating training materials, and acts as a clearinghouse for entrepreneurial information. These varied activities have served to establish the Institute as a focal point of minority entrepreneurial development efforts. One measure of the far-reaching impact of this project is the extent to which local organizations across the Nation have increasingly called on IMBE to provide training services, technical assistance, and information in response to a wide range of specific problems.

Two projects funded this year are designed to assist minority business enterprise in isolated rural areas. Southern Rural Action of Atlanta, Ga., has, during the past 5 years, played a major role in establishing 18 minority owned manufacturing enterprises, providing greatly expanded employment opportunities in rural hamlets. This new MDTA training project will provide intensive upgrading training in the food and building trades, as well as instruction in recordkeeping and general economic development to residents of a five-State area in the Southeast. The Federation of Southern Cooperatives, also located in Atlanta, offers upgrading training to 90 managers and 400 members representing more than 100 poor people's agricultural, credit, craft, and consumer cooperatives. The project covers a 14-State area in the Southeast, and combines residential training at Epes, Ala., with followup by itinerant instructors. The Federation is also developing new instructional materials and adapting existing materials to meet the low educational levels of the rural poor. The majority of trainees are black, with some white and Mexican-American representation. It is designed to support the minority business enterprise program by strengthening the capabilities of rural cooperatives and self-employed individuals.

The Office of Education has supported the minority business enterprise effort in other ways. Staff have participated in a number of conferences with representatives of local community development organizations. They have provided ongoing technical assistance in matters of education and training. Several other proposals to provide entrepreneurial training are presently under consideration for possible funding. The Department of Commerce's Office of Minority Business Enterprise has recently received its first appropriation, and interagency negotiations are underway to encourage joint funding of future training projects. To further coordinate the Federal Government's assistance to minority entrepreneurs, an Interagency Task Force on Education and Training has also been established to formulate policy on the minority business enterprise program.

TRAINING FOR PERSONS IN REDEVELOPMENT AREAS

The Economic Development Administration (EDA) of the Department of Commerce spends $250 million every year in redevelopment areas throughout the country in an effort to stimulate business activity and create jobs. Congress has realized that increased business activity would be of little benefit to redevelopment area residents unless they could qualify for the newly created jobs.

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[1] *Minority Ownership of Small Businesses: Thirty Case Studies*, and *Minority Ownership of Small Businesses: Instructional Handbook*.

As a result, the Redevelopment Area Resident (RAR) training program has been in operation since 1961, first under provisions of the Area Redevelopment Act and then under section 241 of the Manpower Development and Training Act. Its purpose has been to train area residents to become qualified for jobs created as a result of EDA activity. Since January 1971, training proposals directly related to Economic Development Administration loans and grants have received priority for funding, which has reemphasized this major objective of RAR training.

In fiscal year 1971, a total of 144 institutional RAR projects were funded at a total authorized cost of $19,961,464. These projects provided for 7,841 training opportunities. Approximately 60 percent of the cost of institutional training was paid directly to trainees to help defray family, living, and transportation expenses during the period of training. The authorized costs of institutional training averaged $1,040 per trainee. Total authorized institutional costs, including allowances, averaged $2,545.

Characteristics of individuals enrolled in RAR programs differed slightly from those in the MDTA program as a whole. A larger proportion of the enrollees are disadvantaged (75 percent) and poor (71 percent). Thirty-one percent had an annual family income below $2,000. Over half (55 percent) were school dropouts. Of all institutional trainees, there are fewer whites and fewer blacks in RAR projects but more American Indians (16 percent).

During the past year, RAR training for American Indians acquired a degree of sophistication and magnitude not previously attained, with over 1,500 training positions authorized for this group. A fifth of all American Indians among the institutional trainees are in RAR projects, almost all enrolled in training projects on Indian reservations, which are automatically designated as redevelopment areas. For example, one program will train 70 Indians who will either obtain positions with or be upgraded within the Navajo Tribal Gas and Electric Utility Authority at Fort Defiance, Ariz. Other programs for Indians offered training in such fields as construction, health services, machine operation, and mechanical repair, fields which are closely related to economic development.

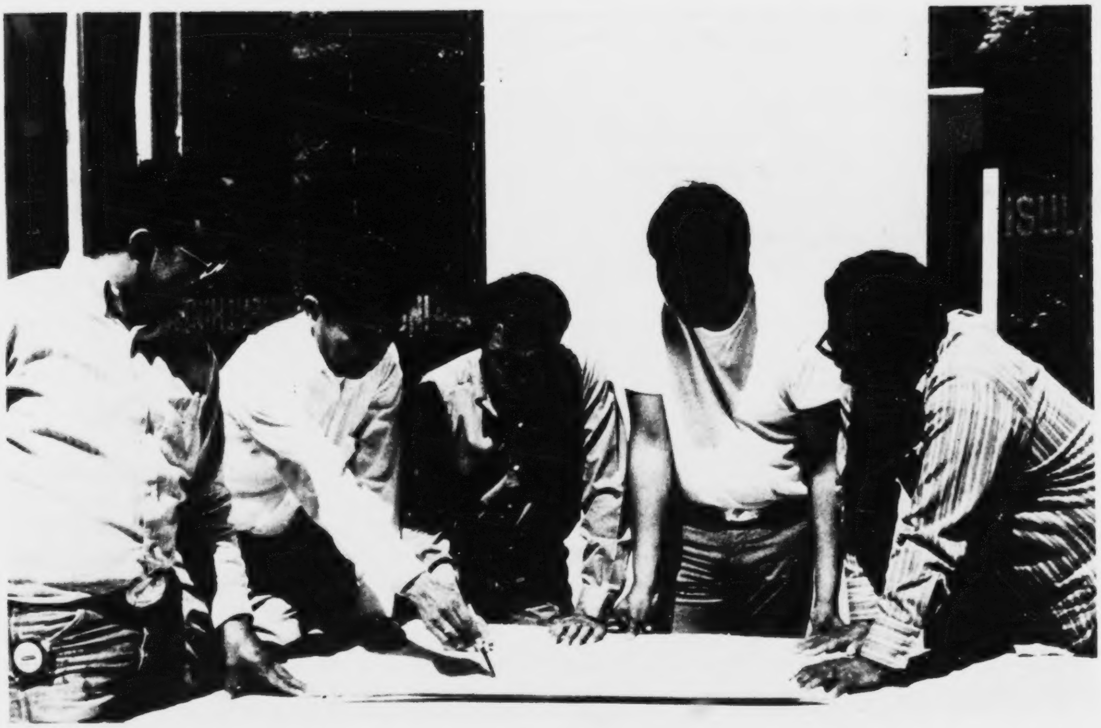
RAR training programs to benefit migrant farm workers are operating in Texas, California, and Colorado. In Texas, a multioccupational training program in three independent school districts is authorized for 650 trainees. This program, planned by a Mexican-American for Mexican-Americans, is now placing people in such occupations as secretary, teacher aide, cashier-checker, auto mechanic, auto body repairman, and welder. Eighty individual referral training opportunities were made available to a training program for migrant workers in Colorado in which the Colorado Migrant Council is recruiting trainees and providing them with prevocational training; skill training in a multitude of occupations has been arranged by the State Board for Community Colleges and Occupational Education. In Fresno, Calif., money was allocated to train 220 migrant workers as general office clerks to fill the anticipated need of a new Internal Revenue Service Center. In all, over $2.8 million of RAR funds were allocated for the training of migrant workers.

RAR training programs benefit both urban and rural areas. A new, $6-million optical goods manufacturing plant began operations in Garrett County, Md., a part of Appalachia, with the help of a training program for 105 trainees. It is expected that employment in this plant will expand to 1,000 jobs within the next 5 years.

On the island of Guam, where a lack of training prevents the inhabitants from taking available jobs, RAR, in cooperation with the U.S. Navy is providing training for 65 people in the fields of teletype repair, pneumatic tool and machine operation, power plant operation, and construction inspection.

In the port city of Pascagoula, Miss., more than 250 disadvantaged persons are being trained as welders, pipefitters, and machinists in coupled programs which combine institutional and on-the-job training. Ingalls Shipbuilding Company, a subsidiary of Litton Systems, Inc., has made a commitment to hire all trainees who complete the course of instruction.

In Brooklyn, N.Y., 125 people in the Fort Greene, Williamsburg, and Bedford-Stuyvesant areas are being trained by the Air Reduction Company for work on a number of supertankers



Through manpower institutional training, American Indians are preparing for needed construction industry positions on or near tribal lands.

being built by Seatrain Incorporated in the former Brooklyn Navy Yard.

In the future, the Redevelopment Area Resident training program is planning to multiply its connections with new and expanding businesses and thereby increase the expectations of employment for people receiving RAR training.

AMERICAN INDIANS

Among Americans whose status as disadvantaged has been most protracted are the Indians. In fiscal year 1971, institutional manpower programs trained about 4,200 Indians both in supplementary basic education and in occupational skills. Training was provided in occupations as diverse as operating engineer, plastic fabricator, fish and gamewarden, key punch operation, boat repair, electronic assembly, and logger job cluster.

The Cherokee Hills Rural Center in Oklahoma is a centralized facility which provides on a full time basis guidance and counseling, related services, job orientation, basic related education, prevocational and institutional skill training for the Indians in this area. The training is structured so that there is an open-entry/open-exit program that allows individuals to enter the program at any time and leave when they are ready for jobs. The center is conducting training in the health occupations cluster, bulldozer operation, clerical occupations, and mechanical occupations for 245 trainees. An additional 120 trainees receive upgrading training in water and sewage treatment and licensed practical nursing.

The construction of the Navajo Generating Station near Page, Ariz., is providing the opportunity for enrolling Indian apprentices in a number of construction trades. The Arizona Construction Training Committee desires to fill these apprenticeship openings with Indians because the plant is located on land leased from the Navajo tribe. The construction work will afford employment to the Navajo and other Indians in a remote area where employment op-

TABLE 3. Major Occupational Group of Training of Enrollees in the MDTA Institutional Program During Fiscal Year 1971

Major occupational group	Total enrollees		American Indians	
	Number	Percent	Number	Percent
Total reporting occupation	87,978	100.0	2,131	100.0
Professional, technical, and managerial occupations	14,762	16.8	390	18.3
Clerical and sales occupations	19,339	22.0	345	16.2
Service occupations	11,211	12.7	295	13.8
Farming, fishing, forestry occupations	1,089	1.2	72	3.4
Processing occupations	350	.4	1	[1]
Machine trades occupations	16,408	18.7	328	15.4
Bench work occupations	3,335	3.8	75	3.5
Structural work occupations	18,388	20.9	533	25.0
Miscellaneous occupations	3,096	3.5	92	4.3

[1] Less than 0.50 percent.

portunities are greatly restricted because of lack of industry and transportation.

In addition to training Indians in specific occupational skills so that they may compete in the labor market, many projects are designed to foster the development of an economic base on a reservation. The Lummi Indian aquaculture project in Washington trained Indians in the construction, stocking, and maintenance of tidal pools for growing and harvesting fish, shellfish, and algae. In Maine, training projects were developed for the Passamaquoddy Indians to support the establishment of a Basket Co-op by the tribe which produces fancy and commercial baskets for the tourist trade as well as for the fishing, potato, apple, and sporting industries in the State. A training and technical assistance project in Michigan will supply 20 Indians with the business and management skills needed for the development and operation of tribal businesses.

TRAINING FOR CORRECTIONAL INSTITUTION INMATES

In the many studies made of prison operation, one feature is that a significant number of the prisoners released do not have the necessary skills or education or counseling to permit them to compete in the job market. Most criminologists concur that this inability to compete in the job market is a major predisposition to subsequent crime and reconfinement. More than 100,000 persons complete their sentences or are paroled each year.

During fiscal year 1971, a total of 54 inmate training projects were funded at an estimated cost of $7.6 million, a significant increase over the previous years. These projects were conducted in five Federal, 41 State, two U.S. Territory, one city, one District of Columbia, and four county institutions. Over 5,300 inmates received MDTA institutional training in such occupations as welding, animal training, divers, oceanography, auto mechanics, landscaping, and drafting.

Most of the training sites were within the institutions; however, some were located in public schools and skills centers. At the California Institution for Men in Chino, a training program was developed to train men for careers in commercial deep sea diving. As a part of the program they were also prepared for licensing as diving equipment repairmen, as a means of broadening their employment capability. One task required them to journey to San Quentin Prison where underwater pipes needed repair. This opportunity was a major test of the adequacy of the training being provided. Not only did the trainees repair the damage, but they also saved the State over $20,000. This MDTA program was administered through the California Board of Corrections and the State education agency. Private individuals and supplies from the U.S. Navy also aided the program. Almost all the graduates have been placed in diving related occupational fields—some as far away as Pascagoula, Miss.—or are helping to instruct new classes.

The Federal Penitentiary in Lewisburg, Pa., was the locale for a program to train 66 inmates in the occupations of small gasoline engine maintenance mechanic, furnace installer, and tractor-trailer driver. This comprehensive program consisted of basic education, occupational training, counseling, job development, and placement as well as development of posi-

Diving and underwater work training are helping to prepare these men for employment.

tive work habits and attitudes. This project was handled through the Williamsport Area Community College and helped the inmates acquire the occupational skills needed for employment upon their release. Incidentally, this community college also conducts other full-time and part-time manpower programs.

MDTA training programs have been operated by the Minnesota State Prison since 1968. Recently a report was completed on 154 individuals who had completed MDTA training and had been released from the institution. At the time of release, 78 percent of the trainees were employed, 7 percent of the trainees were enrolled in school, 8 percent were unemployed; and the status of 7 percent was unknown. Followup studies of graduates revealed that 55 percent had not been recommitted to a correctional institution from the time of their release to the time of data collection, which in some cases was more than 1 year. Twenty-eight percent of the graduates had served additional time ranging from 7 to 390 days during the followup period. About half of the trainees who were returned had committed new offenses, the others were returned for parole violations. The status of 14 percent of the graduates was unknown; however, none had returned to correctional institutions in Minnesota. Although the number of trainees was small, the results of the MDTA training were generally positive. A majority of the trainees were "successful": that is, they had not returned to prison, and many of those who did return had some period of gainful employment following their release. Employment for former trainees after release was more stable and at higher wages than it had been prior to commitment.

PROGRAMS FOR VETERANS

Project Transition was established by the Department of Defense to prepare veterans for productive reentry into civilian life. The Department of Health, Education, and Welfare and the Department of Labor have cooperated with the Department of Defense in this effort by providing special MDTA Transition programs of counseling, education, and training. These programs are crucial because over 300,000 of the 3.6 million Vietnam veterans are unemployed, and 800,000 more veterans are being discharged in fiscal year 1972. Eight and one-half percent of the veterans in the 20 to 29-year-old age group were unemployed during fiscal year 1971 as compared to 6.1 percent a year earlier and 7.0 percent unemployment rate for nonveterans in fiscal year 1971. Twenty- to 24-year-old veterans experienced an unemployment rate of 12.4 percent during this period as compared with 9.5 percent for a similar age group and time for nonveterans in the same age bracket.

Male veterans accounted for 37.3 percent of the male institutional training enrollment. They differed in several respects from their nonveteran counterparts in the institutional training programs, as shown in table 4.

TABLE 4. Selected Characteristics of Male Veteran Enrollees

Characteristic	Male veterans	All males in institutional program
Head of family	73.9	62.4
Primary wage earner	93.2	80.8
12 yrs. or more of school	62.5	47.0
White	73.0	61.4
Handicapped	16.9	14.3

Of those male veterans who were enrolled in MDTA institutional training programs, 3.6 percent were under the age of 20; 43.5 percent were between the ages of 20 and 24; 16.1 percent were between 25 and 29; 17.5 percent were between 30 and 39; and 19.3 percent were 40 years of age or older.

Project Transition programs operated at over 200 bases in the continental United States and Hawaii. MDTA Transition programs operated at 45 military bases. Individual bases trained from 50 to 1,500 servicemen, depending on the size of the base and the number of men available for enrollment.

Until spring 1971, all MDTA Transition programs were located in the continental United States. On April 15, 1971, the Secretary of Defense issued a directive extending the program to overseas areas. At this time, officers also became eligible to enroll in the program. As a result of this directive, it is expected that vocational counseling, skill training, education courses, and placement assistance will become available to all servicemen except in combat areas where tactical requirements preclude it.

To assess the need and practicality of extending the Transition program overseas, visits to bases in Europe and Vietnam were conducted jointly by the Departments of Defense, of Health, Education, and Welfare, and of Labor. It was concluded that job training programs in Vietnam were unrealistic due to lack of space and the transitory status of prospective trainees. However, efforts were being made to establish orientation and counseling programs. A meeting was held in Tokyo, Japan, in November 1971 to further discuss Transition programs for the Far East.

Servicemen are eligible to enroll in transition programs 6 months before discharge. At the time they are given a questionnaire to determine their interest in participating. The program has four components—counseling, skill training, education, and placement—which are available according to the individual's needs and desire. Priority for enrollment in training is given to servicemen who are combat disabled, ineligible to reenlist, do not have a useful civilian skill, or have low educational achievement.

All servicemen participating in MDTA-funded Transition skill training receive at least 240 hours of instruction over a 6-week period. Some MDTA programs extend over several months; the Environmental Protection Agency waste water treatment program includes 420 hours of instruction in a 6-month program. However, training programs may not interfere with the normal responsibilities; therefore, most training programs are scheduled on a part-time basis during off-duty hours. A solution to this problem, which has had a deleterious effect on many training programs, would be to place trainees into special Transition training units. This would permit trainees to devote their full time to training, and base commanders would have sufficient strength to continue to carry out their mission. As a result of a directive issued by the President in September 1971, this idea is being tested. It is anticipated that an additional 12,000 men returning from Vietnam will participate in the Transition program, the majority in MDTA institutional programs, although industrial and on-the-job training programs will also be available. These men will receive their 6 weeks of full-time skill training prior to their projected early discharge, and they will not be available for any other duty.

In fiscal year 1972, the Transition program will train more than 40,000 servicemen including the above mentioned 12,000, which is a tremendous expansion since the program began in 1963 when 1,900 servicemen were trained. All four services participate in the program, although the Army's program is the largest. Training is conducted by unions, trade associations, private industry, private and public schools, and the military's own schools.

TABLE 5. Growth of MDT Transition Programs

Fiscal year	Number of trainees	Millions of dollars
1968	1,880	$0.8
1969	2,660	1.0
1970	12,000	4.7
1971	24,000	8.1

MDTA Transition programs have been offered in approximately 50 different occupations including hotel-motel management, telephone cable repairman and lineman, bricklaying, and drafting. Union contracts have provided training in carpentry, cement masonry, and plastering. The International Association of Chiefs of Police has subcontracted with local educational institutions to provide entry-level police training. The Environmental Protection Agency is sponsoring a waste water treatment plan operator program, which is described later in this chapter. Training programs sponsored by private industry at no cost to the Government have included insurance adjustment, retail business management, and training for mechanics.

Special arrangements have been made for veterans in other MDTA institutional training programs. One example is the Cincinnati public school system, which provides high school credits for all MDTA projects offered at the Stowe Adult Center. Veterans are given priority for enrollment and may complete work toward a high school diploma while at the Stowe Skills Center.

To improve the skills and knowledge of the Transition counselors, some of whom were not professionally trained as counselors, workshops are being conducted by the Area Manpower Institutes for the Development of Staff (AMIDS). During 1971, 451 Army, Navy, and Air Force counselors participated in 18 workshops held throughout the United States. Topics covered in these workshops included: How to relate individual assessment to an occupational structure and help the counselee use occupational information; techniques for referral to supporting services; and concepts underlying effective counseling. Plans are underway to conduct these

Transition trainees at Fort Dix, N.J., receive training for police work.

workshops for counselors stationed at bases overseas.

Many returning veterans, especially members of minority groups, are finding it difficult to find jobs commensurate with their experience, education, and expectations. The Central Alabama OIC in Montgomery is conducting a project designed to aid veterans to obtain the technical assistance, orientation, guidance, counseling, informational services, and the like needed to obtain promising jobs. The project envisions followup services to provide further counseling to veterans to assist them in negotiations with prospective employers. This is a pilot program aimed primarily at the nationwide problem of over 300,000 Vietnam veterans now unemployed. The final report will include a monograph that will permit replication of this experience in other locations.

Ultimately the best group to design a program is the group that will be served by it. Thus a planning grant was given to the Veterans World Project at Southern Illinois University at Edwardsville for 25 or more Vietnam veterans to have the time and resources to define the needs and desires of veterans in returning to U.S. society with particular attention to education and vocational training; assemble information on subjects of concern to them; and, produce and disseminate a project report and proposals to various institutions. Expected benefits from this project are recommendations to the university on ways it may work more effectively with veteran students; courses that might be initiated or modified that would be of particular interest to veterans; and the development of proposals to Government, universities, and employers that are oriented to meet the needs of veterans.

PROGRAMS WITH OTHER GOVERNMENT AGENCIES

The provisions of the Manpower Development and Training Act not only permit but also encourage training under many auspices to get the job done of preparing all kinds of people for all kinds of jobs. These enabling features have provided expanded opportunities for program developers and administrators in arranging for training programs and developing new occupational areas in which training is offered.

By statute, the MDTA institutional programs are the joint responsibility of the Department of Health, Education, and Welfare and the Department of Labor. Thus, training activities of an institutional nature involve the constructive talents of both agencies. Aside from the usual institutional training project administered through the State employment service and education agencies, the two Departments cooperate in the development of national contracts, supplemental classroom instruction for on-the-job training, experimental and demonstration programs, and program evaluations.

There are also many institutional training programs in which other components of the Department of Health, Education, and Welfare are involved. Chief among these are adult education under authority of the Adult Education Act of 1966, as amended; vocational rehabilitation; and vocational education. Linkages between HEW programs are developed at the local, State, and national levels. In many States, adult education instructors provide occupationally oriented basic education for MDTA trainees, and vocational rehabilitation agencies provide health services and prostheses, etc. Linkages with vocational education programs have assisted both programs. A special project has been funded by MDTA for vocational educators which provides for the development of teaching materials and curriculums for the disadvantaged and handicapped. Many vocational education programs have contributed or arranged for facilities, equipment, materials, and instructors for MDTA institutional training programs.

Other training takes place under varying degrees of sponsorship of funding through the Departments of Transportation, Defense, the Interior, and Commerce, and through such independent agencies as the U.S. Postal Service, the Atomic Energy Commission, Appalachian Regional Commission, Environmental Protection Agency, and the National Aeronautics and Space Administration. Central to these activities is the philosophy of using MDTA institutional funds and authority as a catalyst or triggering mechanism for other funding commitments with other agencies. Briefly, such institutional activities come about as these groups are either unequipped to fund or to develop a quality education and training program, or both. Manpower's technical and educational expertise is able to focus on meeting an agency's training need, usually on an important component in one of the programs.

An example of interagency cooperation is a series of joint national workshops sponsored through AMIDS to solve problems of common concerns to the Department of Health, Education, and Welfare and the Department of Housing and Urban Development. The overall objective of these workshops, which were begun in 1971 and are continuing in 1972, is to improve the delivery of housing services to low-income families and individuals. It is hoped that improved services will result by using MDTA training services and techniques with housing management training consultants, community service advisors, housing counselors, and other housing management field personnel. Another objective of the program is to develop continuing cooperative interagency relationships between field personnel in HUD offices and those representing HEW so that areas of joint concern may be identified and suitable training projects developed for them.

Career education is a recently emphasized concept of educational preparation affecting the education and training patterns in the United States of both children and youth in school and youth and adults who are no longer in the educational system. As described by the U.S. Commissioner of Education:

> **Career education is designed to give every youngster a genuine choice, as well as the intellectual and occupational skills necessary to back it up. Career education is not merely a substitute for "vocational education," or "general education," or "college-preparatory education." Rather, it is a blending of all three into an entirely new curriculum. The fundamental concept of career education is that all educational experiences—curriculum, instruction, and counseling—should be geared to preparation for economic independence, personal fulfillment, and an appreciation for the dignity of work.**[2]

With the development of the career education concept has come the realization that education must be a continuous process and that an individual must have access to this process throughout his working life. MDTA institutional train-

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[2] From a speech presented at the 33d session of the International Conference on Education, held September 20–23, 1971, at Geneva, Switzerland.

A timber faller program crew of three and their instructor work their way into a stand of timber.

ing programs have contributed to the adult development phase of the career education concept over the past 10 years by providing occupational skills to unemployed and underemployed individuals and by upgrading the skills of many who are employed so that they may find satisfactory employment and further develop their career opportunities.

THE SPANISH-SPEAKING

Operation SER, the acronym for the Service Employment Redevelopment Project of Jobs for Progress, Inc., is the largest training program by and for Mexican-Americans in the United States. It is jointly funded by the Department of Labor and the Department of Health, Education, and Welfare. The SER organization helps to develop training programs and jobs to meet some of the specialized needs of the Spanish-speaking unemployed and underemployed in Arizona, Texas, Colorado, New Mexico, and California.

SER training programs are carried out in skills centers and local public schools. An important feature is that SER personnel are drawn from the indigenous population. Over 90 percent of SER trainees were able to get jobs because of such training. Since SER was funded to emphasize services to the Spanish-speaking communities, it was necessary for the program to have flexibility and versatility in its approach. An agreement signed in 1971 makes it possible for SER to have an option in decisions on where the institutional training would be conducted. This now enables SER to determine the needs such as training content, methods, facilities, types of instructors, and the like, and more effectively serve the Spanish-speaking communities.

CAMPS

The Cooperative Area Manpower Planning System (CAMPS) has passed its 5th year of operations. There have been some fundamental changes in this system's integrated approach to manpower planning and programing. Basically, its goals are to make available and coordinate all necessary training, services, and facilities to avoid duplication of program efforts and help resolve an area's manpower needs.

CAMPS, as recently described by MDT staff in Missouri, (1) provides a systematic approach, (2) emphasizes the pooling of funds, and (3) makes possible a coordinated Manpower system. The Missouri report further stated that:

The advantages of CAMPS to cooperating agencies are numerous. The system enables an agency to—

1. enter into negotiation in order to benefit from newly coordinated programs and manpower delivery systems;
2. act as a catalyst among other human resource agencies so that they bring their policies and procedures in line with the needs of the community;
3. initiate effective programs which are administratively sound and truly comprehensive;
4. and, most importantly, secure new and greater benefits for its clients.

A recently concluded four-city case study of manpower programs made the following comments:

> **The CAMPS experience is fairly uniform across the cities and corresponds with that across the country. It is a useful exercise in communication. Programs and agencies operating in the same jurisdiction and territory and serving an overlapping clientele should know what the others are doing. Coordination is desirable, but equals cannot coordinate equals. With no power to reallocate funds by vote, the participants have nothing to gain by participating, or to lose by not participating. With no common higher power to whom to report, there is no reason for concession when that is necessary to cooperation.**
>
> **There is no present indication in any of the other cities that CAMPS make a significant difference in program administration. However, coordination inevitably profits from communication, and that CAMPS has made possible.[3]**

In conjunction with the decentralization trend, a network of manpower planning councils, operating at the State and local level has become operational. These planning councils will serve in an advisory capacity to help local and State government and Regional Manpower Coordinating Committees to develop priorities, plans, and recommendations. This means a more sophisticated and responsive way of identifying and matching employee needs, job prospects, and people to be trained, plus paving the way for plans involving actual program funding.

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[3] *Total Impact Evaluation of Manpower Programs in Four Cities.* Olympus Research Corporation, Salt Lake City, Utah. 1971.

IV.

improving program administration

DEVELOPING MANPOWER STAFF

The growth of MDTA training programs through the 1960's created a corresponding growth in the need for a special kind of teacher: a person expert in his occupational skill area, competent in the technology of teaching, and sensitive to the special needs and learning behaviors of disadvantaged students. The teacher who could bring these talents to bear on the learning process needed the support of equally competent counselors and administrators. For, aside from the typical problems of creating and sustaining a vital learning environment, manpower educators faced additional difficulties in helping students with backgrounds and values different from their own.

More often than not, especially as MDTA emphasis shifted increasingly to the disadvantaged, manpower educators found themselves dealing with students with one or more serious problems: Lack of success in formal learning situations, lack of self-confidence, lack of motivation, deficiencies in basic communication or computation skills, difficulty with English as a second or formal language, and personal problems ranging from drug involvement to the burdens of child support. While most manpower educators were competent in their occupational skill areas, it was apparent that many needed additional training in human awareness and the kind of teaching methods that would enhance learning for the disadvantaged student. Administrators and counselors also needed special related training.

Because the traditional teacher training schools of higher education either could not or would not supply this training, the Office of Education created a pilot Area Manpower Instructor Development Site (AMIDS) early in 1968 to offer inservice training to manpower teachers.

Testimony before a congressional committee in May 1968 noted that the AMIDS were created "for the express purpose of helping MDTA instructors and supervisors . . . become more sensitive to the characteristics, problems, and needs of disadvantaged trainees and . . . develop instructional techniques and materials which will permit trainees to experience success."

"The AMIDS," the testimony continued, "will be extremely useful in orienting instructors who are occupationally competent, but who have never taught in a classroom, and in reorienting experienced vocational instructors to MDTA trainees." They "represent a modest pioneer effort in developing instructional techniques useful in teaching trainees with very diverse cultural backgrounds." It was also suggested to congressional committee members that 2 percent of the MDTA appropriation be set aside for use of the Secretaries of Health, Education, and Welfare and Labor for the training of personnel carrying out training-related activities under MDTA.

As a result of that testimony, Congress created section 309 in the 1968 amendments to the MDT Act. Two percent of the appropriation for titles I, II, and III was set aside for training and technical assistance for personnel involved in manpower programs.

Today, programs under section 309 fall into two categories: the AMIDS programs and special programs, both of which offer developmental assistance and training for manpower-related personnel. Many States, too, have developed inservice and preservice training and technical assistance programs for institutional training instructors, counselors, and administrators patterned after the AMIDS model.

AMIDS

The AMIDS programs represent the main thrust of the Office of Education in offering training and technical assistance under the MDTA. Shortly after the 1968 MDTA amendments were enacted, the Office of Education perceived the need to broaden the concept of "manpower instructor development and training" to "total staff development and training." Thus, the meaning of the AMIDS acronym was changed from "Area Manpower Instructor Development Site" to "Area Manpower Institutes for the Development of Staff." By the end of 1970, AMIDS existed in Detroit, Mich., Los Angeles, Calif., Montgomery, Ala., Oklahoma City, Okla., and Washington, D.C.

Also toward the end of 1970, the character of AMIDS was redirected. Now greater emphasis was placed on the cultural and linguistic variables existing in each of the AMIDS service areas. In order to identify these variables and to assist in program planning responsive to the needs of the people in the AMIDS area, each AMIDS has two advisory committees. The Primaria Advisory Committee advises and counsels the AMIDS director as to AMIDS involvement, program direction and objectives, and inclusion of linguistic and cultural variables into program activities relative to the persons receiving AMIDS services. The Primaria Committee is composed of 14 members of whom seven represent Federal, State, and local government agencies, including three who are responsible for the MDTA institutional training program, while the remaining seven members represent the opinions and needs of all segments of the service population area, including the identified cultural and linguistic variables within the AMIDS area. The Secundaria Committee is selected by the AMIDS Director and is generally composed of 15 individuals who represent the characteristics of the population of the service area. The main function of this committee is to respond to the objectives identified by the Primaria Committee, to agree or challenge them, and to provide the AMIDS director with immediate access to information which the director may not have otherwise.

In 1971 two new AMIDS sites were created: in April, the Kingston, R. I., site began to serve the Northeast region; and in June the Portland, Oreg., site began to serve the Northwest States and Alaska. The two additions have boosted the growing service capabilities of the AMIDS centers. By the end of calendar year 1971, the seven AMIDS served about 60,000 manpower personnel representing over 50 different Federal, State, and local public and private agencies at a cost of approximately $3 million or $50 per person. This compares favorably with the 27,000 people AMIDS reached in 1970 at a cost of $2.3 million, or $90 per person. (See appendix B for a list of the AMIDS, their location, and the States they serve.)

Since their inception, the AMIDS have provided a broad range of developmental services to manpower programs either through training sessions (primarily workshops and seminars) or individual consultation sessions. Although the specific nature of AMIDS services vary widely, AMIDS directors have noted that the most repeated requests for AMIDS assistance fall into seven key categories:

- guidance and counseling
- open entry/open-exit training programing
- instructional methodology
- related and/or basic adult education
- cultural and linguistic variables, and English as a second language
- management and administration in manpower training
- interagency relationships

AMIDS conducts training for MDT teachers in Cranston, R.I.

While all the AMIDS deliver services in these seven categories, the focus and thrust of the services vary with the nature and needs of the client personnel. And while all the AMIDS perform similar services, some of the sites have devoted more attention to some activities in 1971 than others.

For example, North Central AMIDS in Detroit has been working extensively with prison personnel in Michigan, Ohio, and Illinois. Additional programs have been scheduled with a prison warden in Indiana and a warden in Wisconsin. Training emphasizes human awareness and occupational training that will give inmates skills they can apply in the job market. "The rate of recidivism is high and growing," noted the North Central director. "These wardens are tired of seeing guys come back for the second and third time. One of the reasons they come back is that they haven't got job skills that will give them an alternative to the crime. These wardens really want our help. So we work with all the prison people from warden down to the guard at the gate."

The new Northeast AMIDS in Kingston and the Northwest AMIDS in Portland have also begun to serve correctional manpower trainers. In addition, Northeast has helped a New York City organization, Service for Education and Rehabilitation of Addicts, to plan the development of a manpower training skills center to rehabilitate Puerto Rican drug addicts.

Southeast AMIDS in Montgomery has provided extensive training to manpower personnel in the use of instructional media. In four 1-week workshops, according to a Southeast instructor, "We've shown the uses of media as an aid to curriculum for disadvantaged students—all the way from bulletin boards to slides to programmed instruction." Southeast has also helped manpower adult education instructors to utilize consumer education materials in their basic education curriculum.

Extensive training in the proper use of instructional materials is one of AMID's strengths.

Both Central AMIDS in Oklahoma City and North Central AMIDS in Detroit have developed workshops to train manpower organizations in techniques of fostering interagency cooperation and linkages to better serve trainees. According to the Central AMIDS Director an interagency workshop in a tricounty area of Missouri was so successful that its participants established an active interagency committee to promote dialogue and to coordinate services. "It's the first time the agencies in that area have ever gotten together," said the director. "Because that area is both rural and impoverished, it needs that kind of cooperation more than usual."

Under a contractual arrangement with the Division of Vocational and Technical Education, U.S. Office of Education, the AMIDS are also conducting special workshops throughout the country to train vocational educators to develop curriculum and supportive media and to modify existing instructional materials to meet the needs and learning characteristics of disadvantaged or handicapped students. In addition to the workshops, each AMIDS has a consultant to provide services to participants as they work in their States throughout the school year. This program will culminate with a followup workshop held in each State to review the activities of participants during the school year; to share information about modifications and materials developed as a result of the workshop; and to identify areas that require further study and effort.

Two other cooperatively developed projects are being operated with the support and cooperation of AMIDS. In Portland, Oreg., a project to train 13 manpower counselors through a combination of academic study and field work is sponsored by the Northwest Regional Educational Laboratory, Oregon State University, and Northwest AMIDS. The project was created following an April 1971 meeting of the Northwest AMIDS Primaria Advisory Committee in which committee members voiced dissatisfaction with the preparation of university-trained counselors to cope with the unique characteristics and problems of manpower trainees.

At the completion of Olympus Research Corporation's evaluation of skills centers, three AMIDS conducted national workshops on the findings of the evaluation teams. These 2-day meetings were held at the AMIDS in Oklahoma City, Okla., Kingston, R. I., and Portland, Oreg. They provided an opportunity for skills center directors, senior employment service representatives at skills centers, regional staffs of the Office of Education and the Department of Labor, and representatives of State manpower agencies to exchange information with each other and to discuss operating problems of skills centers. Major topics of discussion at three workshops were counseling, employment service functions, curriculum, and management information. Program participants were given the opportunity to explore the findings of the evaluation with the Olympus Research teams and to discuss the recommendations made in the final report. Informal discussions, which were an important part of the program, gave many skills center directors their first opportunity to meet with directors from other States and to exchange ideas on improving their programs and solutions to common problems.

Starting in January 1972, all AMIDS have been holding 1-week workshops with local housing officials of the Department of Housing and Urban Development to assist them in developing competencies and models for training residents of public housing in the effective utilization of their domestic resources.

Although AMIDS have been in existence less than 4 years, there is ample evidence that they are meeting a unique need for flexible staff development assistance and inservice training that emphasizes the human, the contemporary, and the practical. Demands for AMIDS services have grown steadily with even traditional schools of teacher education taking note of the AMIDS approach. For example, Central AMIDS has run workshops for a number of teacher training colleges interested in approaches to understanding and working with disadvantaged students. More workshops of this type are scheduled at Central. AMIDS involvements are likely to grow as they demonstrate the capability to meet the "here and now" needs of the educational community dealing with the disadvantaged or handicapped student.

During 1971 an evaluation of the AMIDS program was conducted by Economic and Manpower Corporation of New York City. The purpose of this study was to review the AMIDS concept in operation at five of the AMIDS. The Northeast and Northwest AMIDS were not visited by the evaluation teams, since at the time of the study, they had just been funded and were still in the developmental phase of their operations. The major findings of the evaluation team were:

- The demand for AMIDS services, after 3 years of operation, confirms the Office of Education's hypotheses that training and orientation geared to the problems of the disadvantaged would be welcomed by manpower administrators, counselors, instructors, and other professionals who work with them.

- Though each AMIDS has a local and regional base, they all need (and want) continual guidance and direction from the Office of Education.
- There are variations in the way each AMIDS interprets and implements its aims, objectives, and priorities, but all activities at the five sites visited fall within the broad scope of Office of Education guidelines.
- One of the achievements of the program lies in the diversity in methodology, technique, and program content used in each AMIDS. Each AMIDS thus shapes its work to satisfy local or regional needs.

It was the overall conclusion of the evaluation team that the value and relevance of the AMIDS concept are being demonstrated daily in the work of the five centers studied. Although problems were noted, none were considered to be so substantial as to challenge the need for the kind of service being provided by the AMIDS, or the ability of AMIDS staff to meet that need.

OTHER ACTIVITIES

Section 309 of the Manpower Development and Training Act provides for special staff development and training activities for the manpower education community. For example, the University of Utah Human Resources Institute in Salt Lake City has trained more than 20 persons in manpower administration. This training program featured a combination of academic courses and on-the-job experience in a manpower training organization. The program was prompted by the rapid growth of manpower programs in the United States and the realization that manpower problems required a multidisciplinary approach to develop successful solutions.

In addition to programs described elsewhere in the report, some other training and technical assistance activities during 1971 included:

- training in assisting the growth and development of small minority businesses provided to 100 minority business development specialists at Howard University, Washington, D.C.
- seminars developed by the American Association of School Administrators to help the school administrator develop and implement improved manpower and vocational education programs and to develop and make available a publication on related administrative problems;
- research and analysis of regulations affecting the training and post-release employment of inmates of correctional institutions conducted by RCA Institutes, Inc.

STATE STAFF DEVELOPMENT PROGRAM

Many States have continued and improved their efforts to develop instructional staff and provide technical assistance to individuals in the MDTA program. Generally, these programs may be categorized as specially developed workshops and programs for MDTA staff or as cooperative arrangements with accredited teacher-training institutions. An example of the former is a series of workshops conducted in California by the State MDTA staff for MDTA instructors, counselors, and administrators. The workshops, which were conducted mostly on a question and answer basis with the latest information on the subject distributed at the completion of the discussion, covered such topics as: manpower legislation, skills center management, the cluster concept, individual referrals, equipment management, and program management.

Connecticut, on the other hand, has made available through Central Connecticut College the full range of teacher training courses used by regular vocational education teachers to its MDTA instructors. These courses include basic teacher training, audiovisual methods, counseling, and so forth. Completion of the basic program fulfills the requirements for certification as a vocational and technical school instructor. Classes are held in three locations in the State to reduce travel for participants, and some courses are offered at the Hartford Skills Center as a convenience to the staff. Many States have annual conferences of manpower personnel and use a different theme each year to help participants improve their teaching skills and increase understanding of the institutional training program.

MDTA MANAGEMENT

Improving the administration of institutional training programs is a continuing goal. A number of different efforts are being made to accomplish this goal. Approval of the State administration budgets has been decentralized to the regional offices. Several States are experimenting with different models to discover which is the most appropriate agency and method for approving and operating their MDTA program. Many States have shifted to automated data systems for controlling their equipment inventory. The national office has installed a new communications system to increase its efficiency and assist the States in their operation of the program.

With each year of operating the manpower program, the process for approving *State administration budgets* has become more complex. It became apparent that a formula was needed to more equitably distribute the money that would be used by each State to administer its program, taking into account the need for maintaining a base staff and increasing that amount to provide for program volume. A formula, which provides a base amount for each State with increments based on the size of the State's program, was created in 1971. The 10 Department of Health, Education, and Welfare regional offices were authorized to approve the supervision and direction of budgets for the States in each region.

Changes have been taking place in the *State agencies administering* MDTA programs. In 1962 when the Manpower Development and Training Act was passed by Congress, the Secretary of Health, Education, and Welfare was required to enter into agreements with the "appropriate State vocational education agencies" to carry out the MDTA institutional training program. In 1966 this provision was made more flexible by deleting the word "vocational," thus permitting the Secretary to enter into agreements with appropriate State education agencies. Many States believe that using their vocational education agency to administer the MDTA program is the most appropriate arrangement for them and are planning to continue it.

However, some States have designated other education agencies or are experimenting with other modes of organization to determine which is the most efficacious for them. In Kansas, the Governor designated the governor's office in May 1969 as the responsible agency although the program is actually operated by the division of vocational education in the State Department of Education. In August of 1969 the authority was transferred from the South Carolina State vocational education agency to the State Technical Education Committee. The Delaware Technical and Community College was designated as the responsible State agency for manpower institutional training programs for the State in June of 1971.

Several States are in the process of reorganizing and coordinating the manpower delivery system. These include Arizona, Maine, Texas, Oregon, and Washington. Utah completed its reorganization in spring 1969. The Governor established the Utah Manpower Planning Council as the single prime sponsor for all Federal manpower programs and the sole contracting agency to work with the Department of Health, Education, and Welfare. It has the responsibility of allocating all MDTA funds within the State, designating the agencies that will operate programs using these funds, and monitoring and evaluating the use of the funds. The operational responsibility for MDTA remains with Utah's department of public instruction to provide continuity of program operation and management.

One facet of improved administration involves improving the management skills and knowledge of persons in the manpower field. A program funded under section 309, which provides funds for *training and technical assistance,* is being conducted by the University of Utah to train master's degree candidates as manpower administrators. Another training and technical assistance program developed in 1971 is designed specifically to upgrade the skills of administrators. The National Academy for School Executives of the American Association of School Administrators (AASA) is conducting a seminar to help school administrators develop and implement improved manpower and vocational education programs. AASA will also produce a publication concerning related administrative problems. The goal of the project is to provide one administrative leader in each State with knowledge of manpower programs as they relate to the schools. Other technical assistance programs have been described in detail earlier in this chapter.

In accordance with the administration's philosophy of *decentralization* and giving final approval authority to administrative units closer to program operations, approval authority for section 241 of the MDTA, the proposals for programs to train residents of redevelopment areas, has been decentralized to the regional offices by the Departments of Health, Education, and Welfare, Labor, and Commerce, which jointly approve these projects.

Majority concurrence of the regional representatives of the three agencies is necessary to fund a program. For three quarters of the year the regional offices will fund projects created directly or indirectly as a result of loans and grants provided under the Economic Development Act. On March 31 the regions will forward a list of unfunded projects to the national office which will decide if a reallocation of funds is necessary. A few projects of national interest will still be funded by the national office.

Fluctuations in enrollment caused by project-by-project financing made it difficult to offer trainees a wide variety of skills and generally created severe administrative difficulties. Therefore, pilot programs of annualized planning and operation were established in fiscal year 1970 in three skills centers. They demonstrated that joint agency plans could be developed. However, there was no provision for a stable means of financial support. Therefore, in fiscal year 1971 each State's apportionment was increased to include funds specifically set aside for *base funding of skills centers.* This provided for the center's facility and administrative costs.

This experiment demonstrated that with basic administrative costs covered, other programs could take advantage of the skills centers' resources and enroll their trainees in its training programs. In fiscal year 1972, base funding was discontinued to determine if the States could provide this funding out of their own funds and if other programs would continue to participate.

Accurate, appropriate, and adequate information and data are necessary for good program management. North American Rockwell Information Systems Company (NARISCO) noted several weaknesses in its Systems Analysis Study of the MDTA institutional training program. These included a lack of management information, training expenditure data, and an inadequate reporting system.

The Office of Education contracted with NARISCO to design a format for a *consolidated report* from the local employment service and training facility to rectify these weaknesses. It is expected that this report will identify the essential training project status and funding data needed for management control. The consolidated report will be divided into categories—program data, training expenditure data, allowance expenditure data and a comparison in each category of the intended versus the actual expenditures, enrollment and cost. Aggregate reporting on critical variables will enable administrators to spot programs in trouble.

To design this report form and an accompanying instruction manual, NARISCO staff visited a skills center in each region, the Office of Education and the Department of Labor regional offices, and the State education agency and employment service office in each State in which the skills center is located. The system is being designed to require only data currently being collected at the local level. Some financial data which is reported on the local level but not on the regional or national level will be integrated into the new reporting system. It is planned that the revised reporting system will be ready for implementation at the beginning of fiscal year 1973.

From May 1967 through June 1971, use of the *Federal Excess Personal Property* in MDTA institutional training programs has resulted in savings to the program of approximately $40.9 million. Federal Excess Personal Property provides the program with both consumable supplies and major items of equipment in lieu of new procurement and thus saves appropriated funds originally earmarked for their purchase. Although the major savings are financial, considerable time may also be saved since equipment may be delivered in only a few weeks rather than the several months to a year that it may take when major equipment is purchased.

Each State has designated a responsible official to coordinate, monitor, and recommend approval of all requests for acquisition of Federal excess property. In addition, administrative procedures have been designed to insure that the property is used and disposed of in an appropriate fashion. These procedures include an annual physical inventory, the identification and marking of all property, continuing reviews to preclude use by projects other than MDTA approved training, and the disposal of worn out equipment.

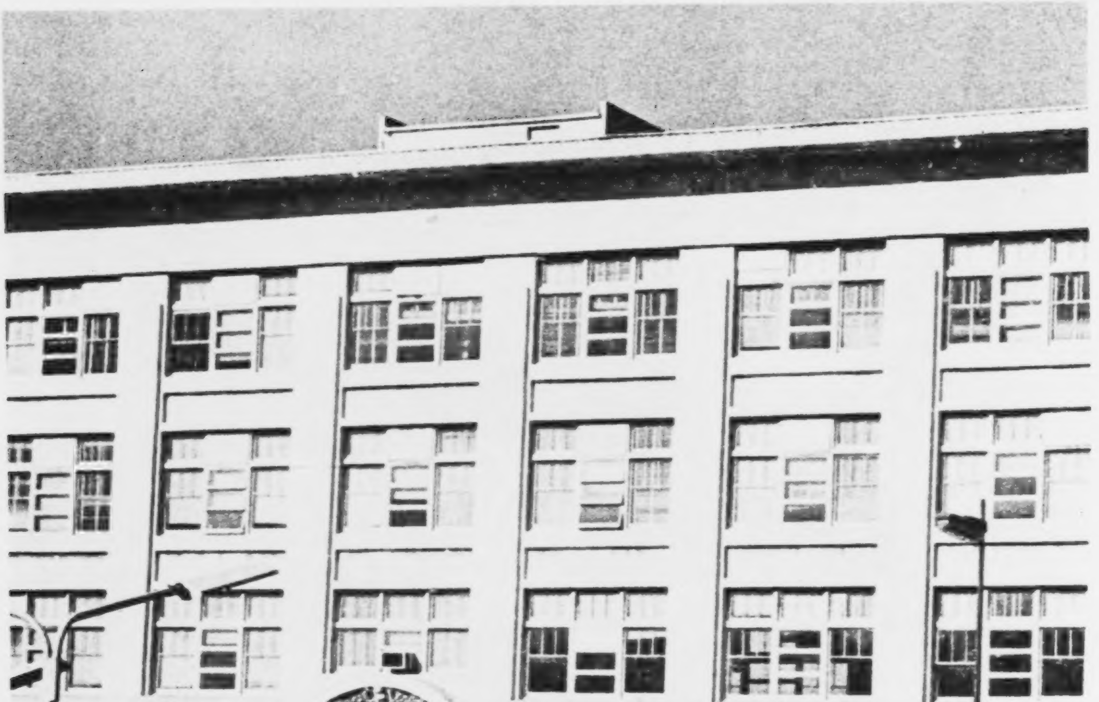
The MDTA training center in Rockingham, Va., which enrolls about 100 trainees a year, is almost completely equipped from items acquired through the Federal excess property system, and is an example of the savings effected through use of Federal excess property. Training is offered in vending machine repair, refrigeration and air conditioning, plumbing, basic electrical work, and loom fixing. During the past 4 years, the center has acquired equipment and materials for its courses valued at more than $100,000 for just

An MDTA trainee moves bulldozer into correct position. Note use of Federal excess property for the project.

the cost of transportation or freight. Some of the many items that have been acquired include refrigerators and air conditioners, sinks, solder and soldering flux for the plumbing classes, classroom furniture, and teaching aids such as overhead projectors, tape recorders, and slide projectors. As courses at the center have been added or changed, the director has been able to keep equipment costs charged directly to the program at a minimum by acquiring the needed items through the excess property system and by using equipment available from other programs in the State.

The skills center in Minneapolis, Minn., was able to significantly expand its enrollment due to a shipment of excess property from Okinawa. This equipment which consisted of 406 items worth $1,731,682, was returned to the United States under the General Services Administration Overseas Property Program-Europe-Pacific. With this equipment, the Minneapolis center was able to establish MDTA projects in food services, engineering technicians, medical technicians, industrial chemistry, and basic education.

Since Federal excess property remains the property of the Federal Government, it may be easily transferred from project to project across State lines as needed, or when it is no longer needed it may be returned to the Federal inventory eliminating the need for extensive warehouse facilities. Vocational, technical and adult education programs are soon to benefit from a Federal excess property program modeled on the pioneer efforts of the MDTA excess property program. Widespread use of excess property by State education agencies and eligible institutions throughout the nation will enable substantial reductions in the expenditure of appropriated funds for equipment and consumable instructional material.



An entire building was obtained from Federal excess property for good use in manpower institutional training in Minneapolis, Minn.

V.
measures of achievement

The MDTA institutional training program has provided enrollees with the skills to get better jobs, higher wages, and more stable employment. These outcomes have been verified through repeated analyses of the data reported by training projects. They are also substantiated by evaluation reports prepared by the States as required in the regulations of the Department of Health, Education, and Welfare and by a series of external evaluation studies.

During the past 2 years, the Department of Health, Education, and Welfare and the Department of Labor have developed and funded a series of comprehensive evaluation studies that have been carried out by several private research organizations, which are experienced in the manpower field. This is the first time in the history of the MDTA legislation that program evaluations have been developed to take an intensive look at the various components of the institutional training program in such a manner that the findings may be combined affording comprehensive coverage of the total program. Four of the studies in this series were completed in 1971 and three others will be completed later in 1972. This current series of MDTA evaluation studies is designed to examine program administration, skills training both in skills center and nonskills center settings, basic education, individual referrals, the extent to which the program is helping employers meet their skill shortage needs, and the outcomes of MDTA training. The findings and recommendations of those studies that have been completed have prompted among other program improvements the development of a skills center handbook, increased attention and improved methods in trainees' job placement, and decentralization of certain program functions to the States and the Federal regions. Several HEW and Department of Labor task forces are also involved in the further study of the findings and recommendations to seek ways in which these can result in improved institutional training programs.

In addition to these large nationally contracted evaluation studies several smaller, but more specific studies were completed during 1971. These included the AMIDS evaluation conducted by the Economic and Manpower Corporation and an in-house study of Project Transition.

All projects and programs are evaluated to some degree as decisions to continue, terminate or redirect various activities are made continually. In recent years evaluation has specifically been made a part of Federal, State, and local responsibilities under the Manpower Development and Training Act, and increased funds are now being set aside by the States for this purpose.

Each local MDTA project is required to evaluate its program, including an assessment of local administration, instruction, supervision, trainee achievement and placement, and to recommend improvements in the instructional program. These evaluations are submitted to the State supervising agency within 30 days of the project's completion. Each State agency having an agreement with the Commissioner of Education to conduct institutional training must submit an annual evaluation report that includes recommendations for program improvement and the need for continuing such training.

STATE PROGRAM ASSESSMENT

Although data provided and developed by local projects and State agencies for evaluation purposes have improved through the years, efforts are underway to further improve and make more compatible the various State reporting and evaluation systems. An annual evaluation of institutional training programs is required of each State by the Regulations of the Department of Health, Education, and Welfare. Much of the information submitted in these reports has formed the substance of this report. The approach used by each State varies: some use self-assessment by local projects, others compile supervisors' evaluations, a topical approach was used by many States to effectively describe their institutional training efforts, and several have relied heavily on contacting those trainees who have completed training to form the basis for the evaluation of their program.

Kentucky developed a procedure for program evaluation using followup reports completed by former trainees. In this instance, 1,334 followup instruments were mailed to graduates and 794 or 59 percent were returned. All responses were carefully analyzed and recommendations were made for program improvement. The major recommendations were:

- to place more emphasis on preparing the trainees for job interviews;
- to develop an improved job placement program with the employment service; and
- to promote more individualized instruction and implement more open-entry/open-exit projects since these have proven to be more successful and serve more trainees during the year. The evaluations made by employment service and vocational education show placement is facilitated if only a few trainees complete training at any given time.

In response to some of the specific questions on the Kentucky followup form, the following data were developed, which in part formed the basis for the State's recommendations for improvement.

Of the trainees who returned the form:

- 83 percent reported that they were employed
- 82 percent felt they were well prepared
- 90 percent thought the quality of instruction was good or excellent
- 72 percent reported that preparation for job interviews was good or excellent
- 69 percent reported that job placement was adequate or excellent

The State feels that the information and suggestions of former MDTA trainees will be useful to vocational education and employment service staff in strengthening recycled projects and in developing and implementing new ones.

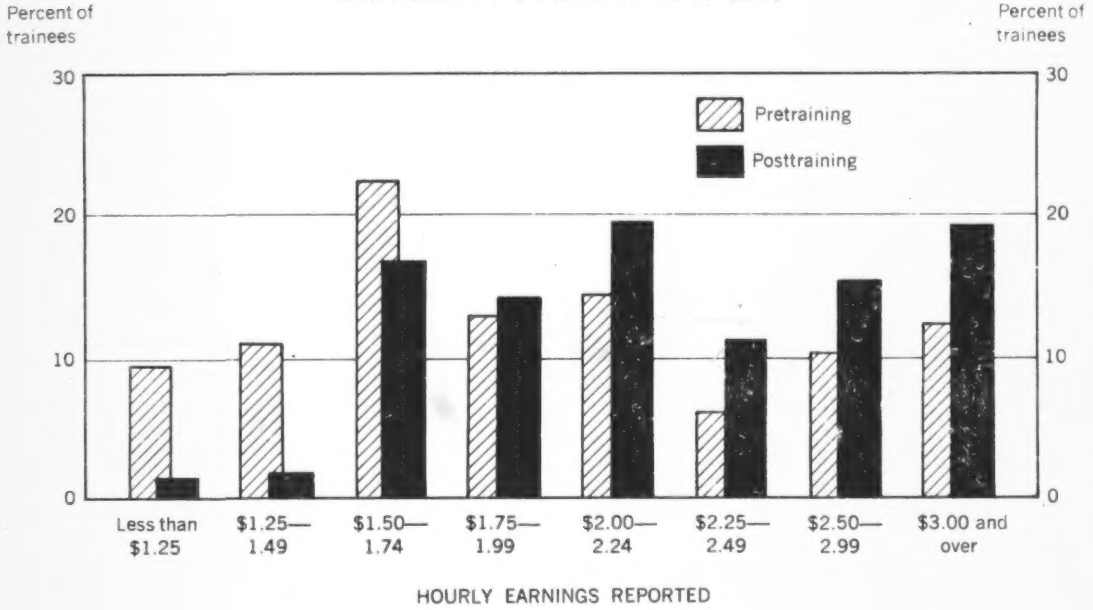
Minnesota also included followup data as part of the State's evaluation of training programs. Since the program's inception in September 1962, 17,344 persons have completed vocational training under MDTA. Of these, 12,842 or 76 percent have been contacted to obtain posttraining employment data. The remaining 24 percent have either not yet been included in a followup survey or could not be located. The results of these surveys which seek posttraining employment information 3 months after graduation are summarized in table 6.

TABLE 6. Minnesota Posttraining Report

	FY 1971		Cumulative FY 1963–FY 1971	
	Number	Percent	Number	Percent
Number completed	2,427		17,344	
Survey size	2,040		16,957	
Number responding	1,785	88	12,842	76
In labor force	1,420	80	11,817	91
Employed	1,092	77	10,292	87
Unemployed	328	23	1,525	13
Out of labor force	365	20	1,125	9

Generally speaking, the Minnesota report concluded that the placement rate for MDTA graduates has been related to the number of job openings in the State as a whole. The peak year

FIGURE 7. GROWTH IN EARNINGS FOLLOWING TRAINING OF EMPLOYED GRADUATES ENROLLED IN CALENDAR YEAR 1970



for placement was FY 1969 when the number of job openings was the highest. FY 1971 has been one of the poorest, as the number of job openings was about one-fifth of what they were in 1969. In 1971, 20 percent of the graduates were not in the labor force 3 months after completion. The majority of these had completed basic education courses and were enrolled in additional vocational training at the time of the survey. Others were not in the labor force for such reasons as pregnancy, illness, and military service.

EARNINGS OF MDTA TRAINEES

Characteristics of MDTA trainees were discussed in chapter II. Additional information is included in the Statistical Appendix. Over 742,000 persons completed training in institutional manpower training projects conducted from the inception of the program in 1962 to the end of fiscal year 1971. Of the 90,300 trainees who completed institutional training programs during fiscal year 1971, 66,000 or 73 percent were employed at the time of last contact. Although rates of completion and employment are one measure of the program's effectiveness, the wages that trainees receive once placed on a job are also an important aspect of the program's effectiveness.

Data have been collected on 11,976 institutional program completers who were enrolled during calendar year 1970, presumed to have completed training during fiscal year 1971. Over 9,000 of the completers employed prior to entering training reported their average hourly earnings in both pretraining and posttraining periods. They show a 17 percent increase in the *median* wage received following training, with their pretraining hourly wage of $1.88 rising to $2.20 after training.

The upward movement of wages was present throughout the wage range intervals. Almost 57 percent of the trainees moved up one or more wage brackets after training; 26 percent experienced lateral movement; and 17 percent reported a lower hourly wage. Before training, over 20 percent of the graduates who reported earnings both before and after training earned less than $1.50 but after training all but 3.3 percent were earning more than that. The number of persons receiving $3 or more an hour increased by 52 percent following training.

TABLE 7. Employed Graduates Reporting Average Hourly Earnings

Earnings	Total reporting earnings			
			Both pre- and posttraining	
	Pre-training	Post-training	Pre-training	Post-training
Number reporting	10,276	10,522	9,054	9,054
Percent	100.0	100.0	100.0	100.0
Under $1.25	9.2	1.4	9.5	1.4
$1.25–$1.49	10.8	2.2	11.1	1.9
$1.50–$1.74	22.0	17.9	22.5	17.0
$1.75–$1.99	13.2	14.7	13.1	14.6
$2.00–$2.24	14.8	19.7	14.8	19.4
$2.25–$2.49	6.3	10.7	6.2	11.1
$2.50–$2.99	10.6	14.9	10.2	15.5
$3.00 and over	13.0	18.6	12.6	19.2
Median earnings	$1.90	$2.18	$1.88	$2.20

The 17 percent experiencing a lower hourly wage after training may be those persons changing to a new occupation. Even though their hourly rate may be less, work may be steadier in the new job, resulting in an increase in total pay, or the job may have greater career potential with a greater possibility for upward mobility. The special study conducted in 1971 by Decision Making Information of over 5,000 persons who left MDTA training projects sometime during 1969 reported that income gains were derived from a combination of increased labor force participation, improved employment stability, and higher wages, in that order of importance. (A more detailed discussion of the Decision Making Information Outcome Study is included later in this chapter.)

Posttraining earnings were highest for the professional and technical group, which includes the medical occupations, where 56 percent received a wage of $3 or more per hour. The lowest occupational group wage, $2.02 per hour, was reported for those who had completed training in service occupations, such as food preparation, building maintenance, and personal services. (See statistical appendix table D–1.)

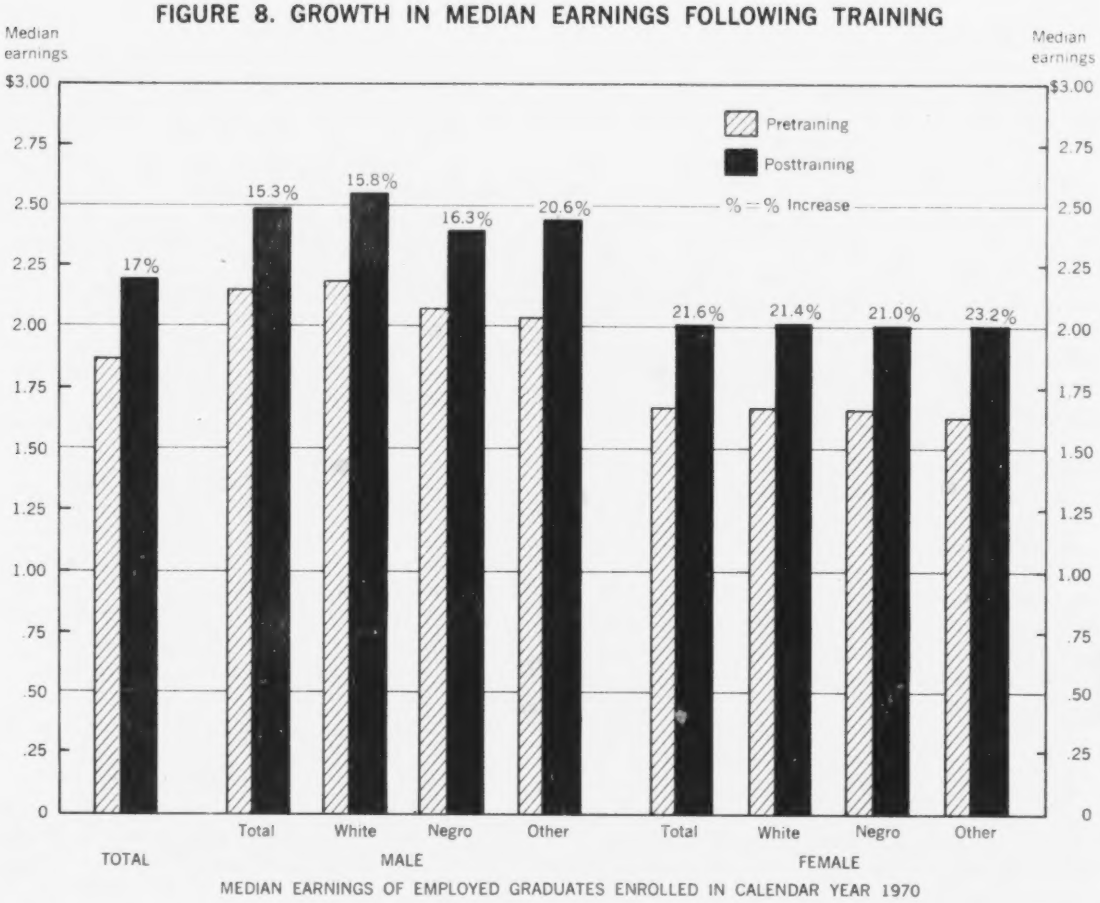
The median pretraining wage ranged from a low of $1.64 for women of non-Negro minority races to a high of $2.21 for white men. After training, the wage range narrowed with Negro and other minority race women both recording a median wage of $2.02 to the $2.56 reported for white men. Before as well as after training, the men received higher wages than the women of all races. The differential in wage rates between the races was greatly reduced in the posttraining period as both the Negro and other minority race trainees experienced higher percentage increases over their pretraining wage rates than the white trainees. The median wage for white trainees increased from $1.98 to $2.24 (13.1 percent increase). The wage for Negro trainees and other minority races increased from $1.75 to $2.11 (20.6 percent increase) reducing the differential between white and other races from 23 cents per hour prior to training to 13 cents per hour after training.

TABLE 8. Median Hourly Wage Rates of Employed Graduates

Race and sex	Median wage rate		Percentage
	Pretraining	Posttraining	increase
Total	$1.88	$2.20	17.0
White	1.98	2.24	13.1
Negro	1.75	2.10	20.0
Other races	1.74	2.16	24.1
Male	2.16	2.49	15.3
White	2.21	2.56	15.8
Negro	2.08	2.42	16.3
Other races	2.04	2.46	20.6
Female	1.67	2.03	21.6
White	1.68	2.04	21.4
Negro	1.67	2.02	21.0
Other races	1.64	2.02	23.2

The median wage for all men was higher than that for all women. This was also the case for each racial group. The men had higher median wages both before and after training. When employed in the same occupational category, the earnings of the males (with the exception of the professional, technical, and managerial group) exceeded those of the females. This could reflect differences in individual occupations entered by men and by women within the broad occupational categories rather than actual differentials in a single or in each occupation within the broad group. For example, in bench work occupations more women are trained as electronic assemblers and more men as TV and appliance repairmen, the latter paying a higher hourly wage. Seventy percent of those trained in occupations in the professional, technical, and managerial group were women, representing over 10 percent of all the women. The wage for 62 percent of the women in this group and the median wage for all these women was somewhere above $3 an hour, in the open-ended "$3 or more" wage group. The wage for 42 percent of

FIGURE 8. GROWTH IN MEDIAN EARNINGS FOLLOWING TRAINING



the men in the professional group was above $3 but the median wage for all men in this group was $2.81 an hour.

Trainees considered "disadvantaged" when they enrolled increased their median wage 7.6 percent following training—from $1.71 to $1.84

TABLE 9. Median Wages by Occupation and Sex

Occupations of training	Male		Female	
	Percent	Median	Percent	Median
Total reporting *both* earnings and occupation	100.0	$2.51	100.0	$2.03
Professional, technical, & managerial	4.2	2.81	10.4	[1]
Clerical and sales occupations	8.3	2.27	31.2	2.04
Service occupations	14.7	2.37	36.3	1.92
Farm, fishing, forestry occupations	4.8	2.11	.7	[2]
Processing occupations	4.9	2.43	2.5	1.88
Machine trades occupations	13.6	2.67	3.5	2.07
Bench work occupations	4.8	2.53	10.4	1.99
Structural work occupations	18.1	2.39	.7	[2]
Miscellaneous occupations	26.6	2.48	4.2	2.24

[1] Median wage somewhere above $3.00.

[2] Too few in group for meaningful median computation.

an hour. Trainees not considered "disadvantaged" at enrollment had a higher pretraining ($2.12) and posttraining ($2.41) wage rate and recorded a still larger percentage increase (13.7 percent) in their median wage.

Average annual earned income before and after training cannot be computed from data available because information is lacking on the number of hours worked and the precise hourly wage received. Over 19 percent of those trainees reporting earnings before and after training were earning $3 or more after training—how much above the $3 base that the wage rose for those in the group is not known. Assuming, however, that these trainees worked a 40-hour week at the minimum rate of $3 for 50 weeks, their annual income would be over $6,000. The median earnings cited in preceding paragraphs to indicate change in earnings following training relates only to the earnings of the trainee at the midpoint of the number in the group and cannot be used to represent the "average" earnings of those in the group. Because of the large number earning $3 or more, 1,737 out of 9,054, the average hourly wage is undoubtedly well above the median hourly wage of $2.20.

If, by comparison, the median wage is used and it is assumed the trainee worked 40 hours a week for 50 weeks, both before and after training, the annual earnings for the trainee would have increased from $3,760 to $4,400, an increase of $640. The actual increase in earnings experienced is quite likely much larger, as nearly 89 percent of the trainees were unemployed at the time of enrolling in training, with over 72 percent reporting unemployment of 15 weeks or longer in the preceding year. The Decision Making Information Outcome Study, which secured data through personal interviews with former trainees on earnings before and after training for each of over 5,000 trainees, reported gains in annual income following training of over $1,800. Preliminary findings of the study indicate that:

> **Impact of training as measured by the change in annual income pre- and post-training for those holding jobs in both periods was greatest for those with Spanish-American backgrounds. Age and education show the same relationship to training as to post-training median income. Participants with twelve years of education seem to benefit the most as there was a slight downturn in income gain among trainees with more than twelve years of education. Contrarily, enrollees with eight years of education or less received the smallest income gain. Enrollees under 45 years of age increased their income more substantially than older enrollees. Whites also increased their yearly income considerably. The percentage income increase for Blacks was greater than for Whites. Overall, net gains were substantial for virtually every group.**

A similar comparison of earnings before and after training was reported for fiscal year 1970 based on 11,000 employed trainees enrolled during fiscal years 1969 and 1970 who reported earnings both before and after training. The increase in median wage was larger, 47 cents (from $1.67 to $2.14), compared to the increase of 32 cents reported the 1971 fiscal year (from $1.88 to $2.20). The two earnings reports are not comparable as the former covered enrollees during a 2-year period, and the general wage level was lower in 1969 than in 1970. Graduates reported higher hourly wages both pretraining and posttraining, the increase being greater than the average 6.5 percent increase of hourly wages in the Nation as a whole during the period.

The increased concentration of graduates reporting after training wages of $3 and over is heavily weighted by professional, technical, and construction occupation trainees. The percentage increase registered by fiscal year 1971 graduates is less partly because of the higher base to measure from, partly because of not knowing the actual wage received by those in the "open ended" $3 and above group; and probably due in part to the general increase of unemployment in the country during 1970 and 1971. The 1971 "freeze" on wages was invoked after the date the above posttraining wages were reported so that it had no effect on their level.

NATIONAL EVALUATION STUDIES

Four major evaluation contracts to study the MDTA institutional training program nationally have been recently completed. These were the **Evaluation of Manpower Development and Training Skills Centers** conducted by Olympus Research Corporation, the **Systems Analysis of MDTA Institutional Training** conducted by North American Rockwell Information Systems Company (NARISCO), a study of the **Quality and Relevance of Institutional Training** conducted by the Mentec Corporation, and the

MDTA Outcomes Study conducted by Decision Making Information. Three new major studies begun during 1971, will be completed in 1972. These are an evaluation of the MDTA in meeting the skill shortage needs of employers, an evaluation of the individual referral method of providing training, and an evaluation of MDTA basic education programs.

The reports and findings of the major evaluation studies completed in 1971 have been widely disseminated to MDTA program administrators at the regional, State, and local levels, and have also been discussed at conferences developed especially for that purpose. Nationally contracted evaluation studies have been of assistance to program administrators by gathering data and information unavailable at the national level and by providing an overview of the MDTA institutional training program throughout the United States as it is actually operated.

A number of the recommendations made by the evaluation teams have been adopted at the national level. In addition, program administrators at the local and State levels have put into practice those changes in operation that are suited to their particular programs. There are also several interagency task forces that are further exploring the feasibility of changing administrative procedures as recommended by the evaluators to improve program operations. Although the evaluation studies varied greatly in scope and purpose, several areas of program operation and administration, such as the reports and information systems, were consistently criticized while other areas, such as the quality of training, were consistently praised. Those recommendations common to several of the evaluation studies are being given the highest priority for implementation, and findings of common weaknesses are also being considered for ways to bring about improvement. The scope and broad objectives of these evaluation studies are such that the impact of their findings and recommendations will continue to be applicable and of use to program administrators for some time in the future.

Women can and do make good machinists. Institutional training offers a wide variety of opportunities to men and women trainees.

SKILLS CENTER STUDY

A brief report on the **Evaluation of Manpower Development and Training Skills Centers** conducted by Olympus Research Corporation of Salt Lake City, Utah, was included in the *1971 Report of the Secretary of Health, Education, and Welfare.* In the report, the Olympus evaluators noted that:

> **Skills centers came into being because there were no other institutions either capable or willing to provide institutional training geared specifically to the needs of the disadvantaged. In filling this vacuum, skills centers have provided, and are continuing to provide, valuable services to the communities in which they exist.**
>
> **Perhaps the most valuable aspect of the skills center concept is that it recognized, more than any other federally sponsored manpower program, that there is no easy way of preparing the disadvantaged for permanent and productive employment. Skills centers emphasize not only vocational training, but programs to increase the individual's capacity to function in a changing labor market. Inherent in the skills center concept is the recognition that in the long run the only way to help a person find economic security is to provide for an increase in his capacity to compute, communicate, and comprehend at the highest possible level, and to encourage continuing training and education throughout all of an individual's working life.**

The Olympus Research Corporation team was also able to assemble the most extensive data yet available on training costs in skills centers. They found that the average center (of the 19 included in the evaluation) allocates costs as shown in table 10.

TABLE 10. Skills Centers Cost Allocation

For every $1.00 allocated to skills centers:

66¢	is for salaries
9¢	is for rent
7¢	is for fringe benefits
6¢	is for supplies and materials
4¢	is for equipment
3¢	is for utilities
3¢	is for other costs
1¢	is for maintenance, repairs, and security
1¢	is for equipment maintenance and repair

Thus 73 percent of an average center's resources are spent on staff costs, including fringe benefits; 12.6 percent on facilities; 4.7 percent on equipment; and 6 percent on supplies and materials. Dividing the total annual costs by the contracted number of training positions or slots would result in an average cost of $2,883 per slot. Since it takes a trainee an average of 29 weeks to complete a program, the average center over the past several years has produced one completer for every $1,397 it has expended. Although based on total enrollment including dropouts, replacements, transfers, and so forth, the average expenditures per enrollee has been $852. The following variables were found to have the greatest effect on skills center costs: Length of training; the ratio of staff to enrollees; staff salaries and fringe benefits; actual enrollment compared to projected enrollments; and dropout and placement rates. The evaluators concluded that the cost of training in skills centers appears to be a reasonable social investment, considering the likely return both to the individual and to society.

The Olympus Research Corporation also evaluated the impact of the skills center guidelines that were developed in mid-1970 by the Office of Education and the Department of Labor. At the time of the field visits early in 1971, the evaluators found that the guidelines had not had a significant effect, either positive or negative, on skills center operations. They felt, however, that the full impact would not be felt until the guidelines had been fully implemented. (Because of funding arrangements to suit fiscal year cycles, full implementation of the guidelines began late in 1971 and will be fully effective in 1972.) However, Olympus Research Corporation was able to report that the guidelines had accomplished the following positive results:

1. **The rules and regulations governing skills centers have been put in writing and have been agreed to by the two responsible agencies, the Office of Education and the Manpower Administration. Thus, the "rules of the game" are now known and understood by administrators at all levels. In the future, this should make inter-agency cooperation a good deal less difficult.**
2. **The requirement for a regional annual review (in cooperation with State agencies) should provide the basis for improved monitoring of the overall program, better knowledge of the programs at the State and regional levels, and improved**

reporting at all levels. Annual reviews should also make apparent the kinds of technical assistance needed by skills centers.

3. **The guidelines have resulted in skills center directors becoming members of CAMPS committees and thus gaining a better understanding of the manpower planning process.**
4. **When the requirement of employment service on-site staff is fully implemented, there is likely to be an improvement in job development, placement, and followup for skills center enrollees, and improved cooperation between the two agencies.**
5. **The guidelines have helped skills center directors protect the integrity of the skills center concept (sometimes against invasions by their own sponsors) and have assured directors sufficient autonomy to administer their programs.**

Followup visits have indicated that adherence to the guidelines is in much greater evidence and that it has resulted in the improvement of skills center programs and their administration.

QUALITY AND RELEVANCE EVALUATION STUDY

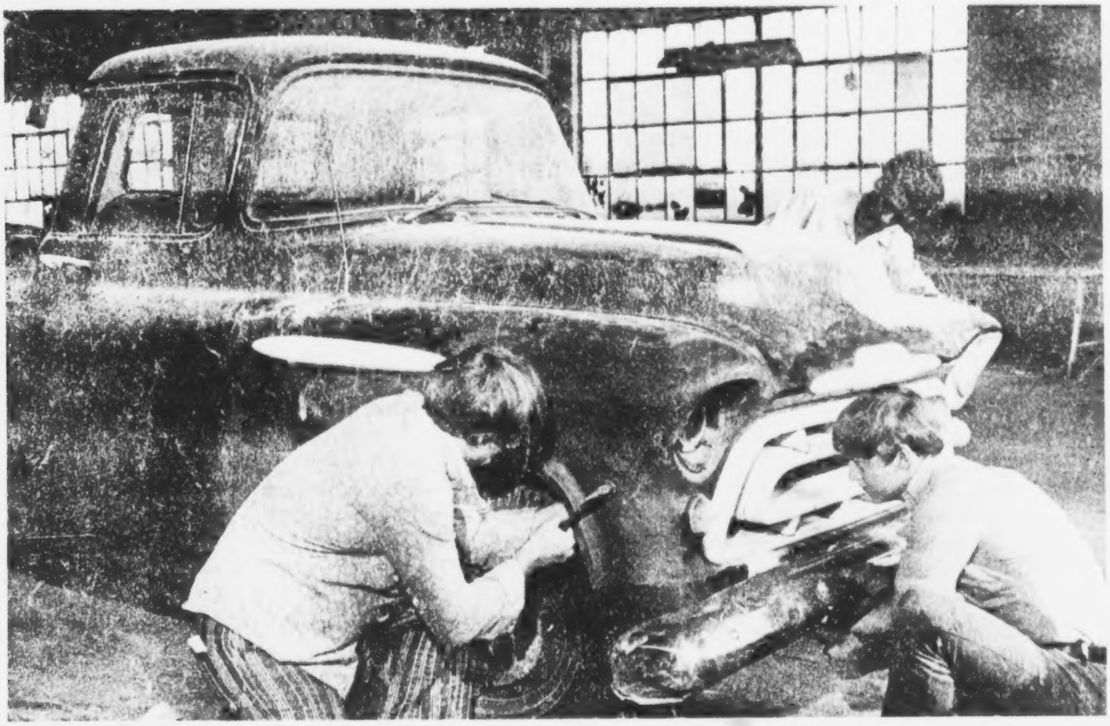
A second study completed in 1971, which also examined the institutional training program, was conducted by the Mentec Corporation of Los Angeles, Calif. The purpose of the Mentec study was to evaluate the relevance and quality of preparation for employment under MDTA institutional programs. The principal objectives were to: (1) determine the extent to which institutional training programs equip unemployed persons with the education and skills needed in current labor markets; (2) assess the quality of training offered; (3) identify those practices and programs that appear to be most effective in preparing trainees for the realities of the labor market and which should be considered for replication; and (4) identify and examine those problem areas that inhibit or otherwise affect the quality and relevance of training programs.

This study took place in 12 labor market areas and included both skills center and nonskills center training programs. It discovered strengths and weaknesses of the program. The evaluators felt that the program's completion rates were lower than should be acceptable for a federally funded program (about two-thirds of the enrollees entering a program completed it). There was, of course, a considerable variation in these rates from city to city and among occupational training areas. They also felt that the relevance of the program to the skills needed in the current labor market was lower than should be acceptable and that program performance could be and should be improved in this area. In the areas surveyed "only approximately one-third of the trainees entering the program are recorded as having obtained jobs related to the training at the time of separation from the program." As was shown earlier in this chapter, the number of trainees who do eventually get jobs is much greater. The Mentec team felt that it was significant that at the time of program termination this number was very low and that program administrators should substantially increase the number of trainees who go directly to a job when they complete training.

The quality of training itself, both occupational skills training and basic education, was found to be high and to provide the skills needed to meet job requirements. This finding was further supported through interviews with employers who felt that former MDTA trainees were performing well on the job and had satisfactory work habits. The trainees, too, felt that they had received training that met their needs, that they were now able to achieve their goals, and that training had a beneficial effect on their personal activities as well.

The report concluded with the following recommendations for increasing the relevance of institutional training to labor market requirements:

- Standards of systems effectiveness based on placements as a percentage of enrollment should be adopted.
- Methods of forecasting local labor market requirements should be substantially augmented and refined.
- Improved methods for determining the potential of training applicants should be developed and standards of eligibility for entrance into occupational skills should be adopted.
- The function of job development should be technically improved.
- A meaningful management and accomplishment reporting system including a quarterly review and analysis for the local employment service and training institution should be prescribed and adopted.



Entry-level auto body training helps to meet the continuing demand in this occupational area.

As a result of these recommendations, the Department of Labor is working toward the establishment of criteria for program placement rates. It is also seeking new methods to improve job placement services to MDTA trainees.

The following additional recommendations which the evaluators felt would increase the relevance of institutional training to the needs of the disadvantaged were made:

- The concepts of central administration, base funding, and total vocational training that have contributed to the innovative progress of the skills centers should be adopted by other institutional manpower training facilities.
- The employment-at-enrollment feature of the JOBS program and the professional capabilities of the institutional training system should be legislatively correlated to permit the operation of a training-to-jobs system that utilizes the best features of both programs.
- The special needs of the disadvantaged trainee should be recognized and assurances of retention of the trainees in the productive labor market should be enhanced by the provision of technical assistance and supportive services to the employer/employee.

Differences between skills center and nonskills center training programs were also noted. Most of these were considered intangibles, but the evaluators felt that there was more administrative and instructional freedom in skills centers which benefited the trainees in these programs.

MDTA OUTCOMES STUDY

A third evaluation study of the institutional training program, contracted by the Department of Labor, was conducted by Decision Making Information of Santa Ana, Calif. Although the final work on this study has not yet been completed, the field work and preliminary analysis of data were completed in 1971. The study is an examination of the outcomes of training for a stratified sample of former enrollees in the institutional and on-the-job MDTA training programs. The study also compares the participants present situations with those prior to program enrollment, and it identifies relationships between program participation and situational change. Additional objectives of this study included:

- To identify factors other than program involvement that have been of broad significance in causing situational changes in the sample population.
- To determine which program elements are of the greatest and least significance to the extent that program involvement is a cause of change.
- To analyze the nature and extent of any significant difference in the postprogram experience of those who completed and those who failed to complete their MDTA program.
- To identify the characteristics of those persons who appear to have received the greatest or least benefits from program involvement.

Personal interviews were conducted by a staff of specifically trained interviewers with 5,169 MDTA program participants in 40 communities throughout the United States. Of this group, 1,702 had been enrolled in on-the-job training (OJT) programs and 3,467 had been enrolled in the institutional training program. At the time of the interviews, which were conducted during the spring of 1971, approximately 6 out of 10 former enrollees were currently employed. Those who had received OJT reported a higher rate (66.5 percent) of employment than those who had received institutional training (59 percent). According to data from the Individual Termination/Transfer Report, the completion rate for OJT trainees was also higher (81.4 percent). Most of the trainees in both programs were between the ages of 22 and 34 at the time of the interviews. The OJT trainees had a slightly higher average than the institutional trainees on most common indicators of socioeconomic status, such as education and income.

The median hourly wage for all posttraining jobs held by OJT respondents was $2.29 per hour, which represents an increase of $0.42 over pretraining earnings. The median hourly wage for all jobs held by institutional respondents was $2.14 per hour, which represents an increase of $0.36 an hour. Government training programs were identified as helpful in obtaining work in 32 percent of the jobs held by OJT respondents and in 43 percent of the jobs held by the institutional training program respondents. Nearly 2 out of 3 former enrollees reported using their training on a job. Good things that trainees remembered about the program most often were the quality of the teachers and the amount learned in training. Changes that should be made in training programs, which were most frequently mentioned by trainees, were teaching more advanced skills and lengthening the program.

Women profited slightly more than men from institutional training, the young more than the old, and the better educated more than the less educated. Whites gained more than other racial groups and Spanish-Americans did spectacularly well. The fact that persons who had never been married achieved greater gains than persons with other marital status was probably a function of age. Except for the largest households, income gains were consistently greater with an increase in family size. Trainees who had been on welfare gained as much in terms of income as trainees who had never been on welfare. Even those on welfare at the time of interview made small gains. There was some tendency for those with the lowest pretraining annual incomes to make the greatest gains, but this was not consistent across groups. Even the highest posttraining annual incomes were not appreciably above the poverty level.

Institutional training completers had about three times the income improvement as institutional program dropouts, but the latter still made substantial gains. There was a consistent growth in income gains with longer length of training.

Among institutional training occupations, health services produced the greatest benefits, followed by machine trades, construction trades, food services/homemaking, clerical/sales, and service trades, in that order. However, this ranking was heavily affected by those entering the labor force through the training route, therefore favoring occupations popular with females who were more likely to have been out of the labor force before training. Abstracting from the increases in labor force participation would bring construction trades to top ranking, followed by health services and machine trades. Only a scattering of miscellaneous skills seemed to lack substantial impact. Basic education and other components unaccompanied by skills training were reasonably effective for those previously out of the labor force, but had little wage and employment stability impact.

In summary, key findings of the Outcome study include:

- Income gains of disadvantaged enrollees were, on the average, more than double those of the nondisadvantaged, even though the latter had higher pretraining and posttraining incomes.
- Income gains were derived from a combina-

TABLE 11. Estimated Annual Income and Change (Posttraining and Pretraining) in Estimated Annual Income by Occupational Training for Institutional Enrollees

Occupational training	Pretraining income	Posttraining income	Change/those working pre and post	Change/those working post but not pre
Total group median	$2,570	$3,473	$ 841	$1,876
Health services	2,558	3,483	1,108	2,994
Food services/homemaking	2,173	3,105	751	1,864
Clerical/sales	2,020	3,042	833	2,028
Service trades	2,500	2,575	424	1,118
Mechanic repair	2,818	3,706	872	1,984
Construction trades	2,808	4,354	1,470	2,462
Machine skills	3,461	4,561	1,009	1,660
Other skills	3,264	3,659	445	418
Nonskills	2,121	2,452	164	870

tion of increased labor force participation, improved employment stability, and higher wages, in that order. MDTA training provided a highly successful route for entry or reentry into the labor market.

- Typically, the greater the length of training the higher the expected annual income gain.
- The more skilled occupations tended to have the highest payoffs. Construction trades and health services led the field.

Based on these findings and others, the evaluators made the following recommendations:

- MDTA training, both institutional and OJT, is a high-payoff public investment which should be expanded.
- The higher average income gains for disadvantaged than nondisadvantaged enrollees support continuance of the present emphasis on service to this target population.
- Since the tendency is to leave participants better off but still poor following training, since income gains correlate with length of training, and since those occupations generally recognized as being more highly skilled and requiring the longest training time tend to result in both greater income gains and higher posttraining incomes, it would be a wise public investment to emphasize those occupations, even at the resulting higher per capita costs.

The data developed as a result of this study are currently being subjected to additional analyses and will undoubtedly be of great use to program analysts for some time to come. To further test some of the findings of the outcomes study, a continuous work history sample of former MDTA trainees, developed and maintained by the Department of Labor, is being used as a control group. Data for the work history sample are developed from information from the Social Security Administration.

SYSTEMS ANALYSIS STUDY

The skills center evaluation and the quality and relevance evaluation were both concerned with the training and instructional components of the institutional training program. The outcomes study was concerned with the posttraining benefits that accrued to trainees as a result of participation in the program. The fourth evaluation study completed in 1971 was concerned with the systems and methods of administration by which the institutional training program is operated. This 11-month study was conducted by the North American Rockwell Information Systems Company (NARISCO) under contract to the Department of Labor. The study covered program management at the national level and a field study of the 10 regional offices of the Department of Labor and the Office of Education as well as MDTA institutional training operations in 12 States.

The following is a report of the strengths and weaknesses of the program as assessed by NARISCO; it does not necessarily reflect the views of the Department of Health, Education, and Welfare or of the Department of Labor:

> **As a background against which findings and recommendations should be considered, certain impressions of the nature and climate of the MDTA system gained during field visits are presented:**
>
> - **The program is characterized by dedicated personnel who are motivated and interested, and who were extremely cooperative with the study team. On the whole, personnel**

worked well together despite the division of functional responsibilities between the employment service and education. However, this division of responsibility did seem to result in a gentlemanly reluctance to probe into the functions of the other agency.

- The MDTA institutional program is highly regarded by most administrators. The reasons for this high regard appear to be based on the belief that education and training are of long term value in addition to the immediate benefit of employment. Another reason contributing to its good reputation is that, owing to its origin as a retraining program, MDTA has, in the past, attracted a better qualified trainee than the present programs which are now aimed at the hard-core disadvantaged.
- MDTA institutional training is regarded by manpower professionals as being an "ongoing program" that "runs itself." Although there appear to be a number of administrative impediments, this attitude seems to be justified. It may be that the program, because it is running without major difficulty, does not receive the emphasis or critical analysis that it deserves.
- Changing program goals have resulted in shifting the emphasis on manpower training, and this has affected program administration. Changing trainee target populations, development of related programs such as JOBS, CEP, WIN, and Job Corps, and the changes in the national economy and in training occupations have imposed demands for flexibility and responsiveness on the institutional training system.
- Some criticism has been made of MDTA institutional training to the effect that, on one hand, it lacks flexibility and sensitivity to the needs of the disadvantaged, and, on the other, the training is not thorough enough. This condition arises either through overemphasis on skill training and hence high entry requirements, or through emphasis on prevocational training, which, to avoid prolonged training periods, causes a reduction in skill training. In making these difficult adjustments, MDTA institutional training has suffered from the same problems as the other manpower programs for the disadvantaged.
- It may also be that the painstaking and time consuming processes for developing and funding MDTA projects contribute to its reputation. This report is critical of the time delays attendant to the processes and of the lack of a responsive decentralized system. Nevertheless, it is well to bear in mind that there is some risk to a departure from time-tested procedures.
- Perhaps the strongest impression received is that the methods of individualized instruction and attention to the needs of the disadvantaged developed in MDTA are of potentially great benefit to vocational education and to the entire field of general education. It is said that instructors experienced in MDTA training have an outstanding ability to relate to their students in general education.
- On the whole, the MDTA institutional program is fulfilling its mission of providing useful employment training to the disadvantaged, notwithstanding a number of administrative impediments.

According to NARISCO, the MDTA institutional program is an extremely complex administrative structure which has, nevertheless, the following significant *strengths:*

Accomplishing Mission. The MDTA institutional system appears to be providing useful skill training to disadvantaged persons. Administrative impediments to the system were noted, but they are often overcome by the experienced and resourceful program staffs.

Achieving Enrollment. Institutional training enrollment has, over time, exceeded the number of training opportunities authorized. There is, however, deferred enrollment, delayed expenditures, and substantial loss of training capacity.

Innovation. Experimental and demonstration efforts have resulted in useful experimentation and change in MDTA employment, training, and service methods. Improved methods of research utilization would expedite and widen its utility.

No Waste of Money. No evidence was found of misuse of funds despite the long time intervals over which money is obligated. Expenditures may be deferred, however, over several years.

Program Coordination Efforts. Improvement in program coordination and in the dissemination of useful information through the CAMPS system was noted. Some States, through manpower councils, are moving toward effective program integration. None, however, had achieved it at the time the report was completed.

Property Utilization. The use of Federal excess property and National Industrial Equipment Reserve property is providing valuable support to the program.

Allowance Funding and Controls. The allowance payments and reporting system is notably efficient in providing up-to-date allowance obligation and expenditure data at all levels. This has resulted in effective decentralization of project allowance funding to regional and State levels.

Good Reputation. The institutional program is widely considered to be among the best of the manpower training programs. This approval appears to be based on the experience and stability of the program, and upon the belief that the training provides benefits apart from employment.

The following factors were noted by NARISCO as *inhibiting* performance:

Overestimation of Costs. It is common to overestimate training and allowance costs for training projects. This ties up funds unnecessarily and results in subsequent need for deobligations and in a number of instances the loss of money to the program through the reversion of funds to the U.S. Treasury.

Delays in Planning, Startup, and Closeout. Project startup is delayed an average of 4½ months from the determination of need (Form MT–1), and 2½ months from project approval (Form MT–2). Project closeout, on the average, occurs 16½ months from the determination of need for those projects offering training for a period of less than 12 months. There may be additional delays caused by delayed appropriations. Delayed funding and approval can put such tension on the system that stereotyped projects are rushed through to meet deadlines.

Deferred Enrollment. Large projects and skills centers are often underenrolled. This results in leftover funds and training costs higher than planned. Enrollments are made up by replacing dropouts and by extending training projects with the unused funds.

Inflexibility. Program managers are impeded in responding to current needs by the controls on project approvals and changes, and by control on funding. Changing subprojects in a large project, and any change in funding, requires national office approval if the project is funded from prior year money, which is often the case because of delayed starts and overestimation of costs.

Dropouts. The program is characterized by a significant number of noncompleters. This appears to result from trainee characteristics, inadequate selection and referral procedures, or an inability to provide the supportive services that are needed or an unwillingness to do so because of the costs of these services.

Lack of Management Information. Reporting is often incomplete and delayed. It does not provide useful information to program managers at any level. It is often ignored at the State level except for the fact that it is a Federal requirement. It does provide statistical data for national level reports, but has become increasingly inadequate even for this purpose. The required reports for large open entry/exit projects do not contain important management information such as class size and length of course. The reporting of slot utilization is not meaningful to local managers.

Lack of Training Expenditure Data. There is a lack at the national level and in some States of periodic reporting of training project expenditures. Although such information is available at the State or local level, it is not reported. This prevents monitoring of fund status and possibly early use of excess funds for other projects.

Competing Programs. MDTA institutional training programs sometimes compete for trainees from other programs such as CEP and JOBS. This results from the overlapping purposes and jurisdiction of the programs. Exchanges of services are sometimes effected, but relations are not truly cooperative.

Planning Does Not Influence the Budget. The States and regions have no way of making their needs known to the national level in time to influence the development of the budget. The CAMPS planning system is too late to influence national budget formulation.

As a result of its investigations, the NARISCO evaluation team recommended the following administrative actions that would improve program performance without sacrificing program strengths:

Advance Planning. The CAMPS planning cycle should be advanced to 3–5 years, with a single annual Federal guidance issuance not tied to the current budget estimate. States should revise their plans once a year. Contingency planning should be incorporated in a semiannual review.

Joint Reporting and Program Control. Starting at the lowest level, program data and allowance and training expenditure data should be incorporated into a single periodic report. The control of training in occupational skills for disadvantaged persons is a complex process requiring the cooperation of several agencies. Control of project performance would be enhanced by a standardized training operations and program control manual adaptable to local conditions. This would clarify processing for all employment, training, and supporting personnel.

State Project Approval. Project approval and funding, subject to Federal budgeting and reporting controls, should be delegated to the States. Preparation of the Form MT–1 (determination of need for training in a particular occupation) early in planning and long in advance of Federal review tends to stereotype training projects and inhibit adaptation to changing local conditions.

Advance Funds to the Department of Health, Education, and Welfare. The Department of Labor should allot a substantial sum to DHEW at the beginning of the year. DOL now advances funds to DHEW largely on a project by project basis. DHEW should allot at least 25 percent of the States apportionment initially, and as MT–2s are approved at the State level, issue additional funds subject to prompt reporting by the States.

Executive Coordinating Committees. A separate institutional operations committee of three members should be created at the National level; one from DOL, one from DHEW, and one from OMB, or designated by the national CAMPS committee. The committee should act on national budgets, guidelines, and national institutional contracts. Similar committees should be created at the regional, State, and local levels.

Allow States Reserve Funds. Until project approval and funding is delegated to the States, permit retention of a reserve (possibly 5 percent) under State control. This could facilitate more accurate estimates of project costs and free more funding for training.

In summarizing its recommendations, the NARISCO report stated:

> **. . . a major change in program administration is recommended, decentralizing much program control to the States. The study group is not unaware of the current interest in the decentralization of Federal functions to States and localities. It is our opinion that decentralization will improve the program and that the MDTA institutional training program may be one of the best Federal systems for decentralization for a number of reasons. The program has operated for 8 years as a joint Federal-State/employment-training system, it has established standards of practice and, through CAMPS, has developed procedures for coordination with many agencies and at several levels.Experienced staffs have developed in the States. The program has also been characterized by progressive reduction of Federal controls and increased State authority. The conditions under which decentralization will be undertaken appear to be very favorable in this program. Some problems may arise, however, not in the area of runaway programs, but in the lack of initiative in the States. The existing pervasiveness of Federal regulations will probably be difficult to overcome.**

Men who have worked in the forest industry all their lives were recruited as instructors in an MDTA-funded program in Montana. The instructor shows a new hand how to adjust the chain tension on an equally new chain saw.

OTHER NATIONAL EVALUATION STUDIES

Three major evaluation studies were begun during 1971. They are concerned with basic education in the MDTA program, the effectiveness of institutional manpower training in meeting employers' needs in skill shortage occupations, and the MDTA individual referral program. Although the work on these evaluation studies will not be completed until mid-1972, some of the preliminary findings as reported by the evaluation teams are of interest.

The purposes of the evaluation of the *effectiveness of institutional training in meeting employers' needs in skills shortage occupations* are: to identify occupations which would be suitable for institutional training in which there are persistent local and regional shortages of workers, to determine and quantify the extent to which training has been conducted in these occupations, and to assess the effectiveness of institutional training in providing adequately trained manpower in response to employers' needs. The study is being conducted in 14 locations throughout the United States and includes interviewing of employment service and school officials, CAMPS members, officials of employers associations, and approximately 25 employers in each of the locations. In addition, national, regional, State, and local records are reviewed to assist in the determination of which occupations are indeed skill shortage occupations having a demand for trained workers. The evaluation will also develop performance data such as enrollment, completion, and dropout rates for projects included in the areas studied. The findings reported here emerged quite early in the study, consequently they may be modified once all the field data are gathered and analyzed. The MDTA institutional training program is offering training in skill shortage occupations, but the occupational offerings are much more limited than they need to be. Findings for four cities indicate that MDTA provided training in 28 different occupations while 270 occupations were tentatively identified as shortage occupations. Thus, there are many occupations that would be suitable for MDTA institutional training for which no training is now being offered.

A second major impression was that the system for developing training projects was deficient. The system for project development is based on the major assumption that adequate knowledge of the local labor market exists. While there is much information on a local labor market, much of it is in aggregate form and is concerned with broad occupational areas rather than specific jobs. Thus training projects are usually based on obvious occupational skills shortages with little variety in offerings. It may be that because of this apparent lack of procedure to examine a local labor market closely that the institutional training program has overlooked occupational training opportunities for trainees. The skills shortage study is being conducted by Olympus Research Corporation under contract to the Department of Labor.

The second study begun in 1971 was an examination of the MDTA *basic education program* by North American Rockwell Information Systems Company. The major objectives of this study are to assess the effectiveness of basic education in providing communications, computational, and employability skills; to analyze the relevance of basic education programs to labor market requirements; and to identify adverse factors affecting program success. In addition to classroom observations, data collection, interviews with trainees, training and employment service staff, and State MDTA officials, this study is using a standardized test administered twice to more than 1000 trainees to measure rate of gain in verbal and computational skills as they progress through training. Current estimates on the time it takes to advance one grade level are so varied from program to program, it is hoped that this procedure will provide program administrators and instructors with more accurate data in this area. Such information would assist greatly in the planning of basic education programs in the future as well as permitting an additional measure of the effectiveness of ongoing programs.

Some of the initial observations reported by the contractor as a result of preliminary field work were that the trainees, instructors, and the employment service feel that basic education is a necessary and useful component of the MDTA institutional training program. The need for providing basic education is further supported by a preliminary analysis of the first wave of test scores. The NARISCO team found that the average trainee's reading test score was approximately 3.5 grade levels below the highest grade that he had completed. (Trainees tend to make higher scores on tests dealing with computational skills than they do on reading comprehension.) Instructors teaching occupational skills felt that reading comprehension is a skill most needed and most useful to trainees.

Early visits noted some problems in the implementation of individualized instruction. The use of this technique is necessitated by the fact that in most programs, new trainees enter every week and their educational achievement levels vary widely. While some training sites have well equipped learning laboratories, a variety of materials, and continuing inservice training and curriculum development work, many are hampered by lack of facilities, materials, and trained instructors. Project directors are aware of the shortcomings in this area and are working to improve basic education programs. During the second wave of visits, to be conducted in early 1972, the NARISCO team expects to find improvements based on plans that center directors discussed with them during their initial visits.

In its final report the NARISCO team hopes to deal with such issues as:

- What individualized instruction techniques are most appropriate for MDTA trainees?
- How can scheduling of basic education be most effectively handled?
- How should basic education be evaluated? What tests and checks should be made? What records should be kept?
- How can MDTA cope with a wide diversity of achievement levels? Should changes be made in selection and referral procedures?
- How can an instructional staff who are competent in several disciplines be developed?

The answers to questions such as these and the analysis of rate of gain over time of trainees enrolled in basic education should be most useful to MDTA program administrators in planning future basic education programs.

Field work on the *individual referral study* was begun late in 1971, and no preliminary findings are yet available. The purposes of this evaluation are to assess the effectiveness of the individual referral system as a means of broadening the occupational choices of trainees and as a means of making training available to persons in situations or areas in which class-size programs are not feasible; to assess the quality and effectiveness of the educational programs including the availability and appropriateness of counseling, remedial education, and supportive services provided in meeting both the needs of MDTA trainees and the job requirements of the labor market; and to develop comparable data on trainee characteristics, staff qualifications, program costs, and performance data to make valid comparison with data from other sources describing trainees in class-size projects. This evaluation, which will be completed in mid-1972, will be conducted in 12 locations.

Students practice trailer backing skills at MDTA training site near Georgetown, Del.

appendix A
manpower training skills centers

REGION I

Connecticut

Hartford MDTA Skills Center
122 Washington Street
Hartford, Conn. 06106
Tel: 203/527-3855

Massachusetts

Boston MDTA Skill Center
15 Lubec Street
East Boston, Mass. 02128
Tel: 617/742-7400 ext. 308

REGION II

New York

Rochester MDTA Center
242 Main Street, West
Rochester, N.Y. 14614
Tel: 716/325-6934

Syracuse MDTA Center
917 Madison Street
Syracuse, N.Y. 13210
Tel: 315/475-1645

Adult Education Center
Rochambeau School
228 Fisher Avenue
White Plains, N.Y. 10606
Tel: 914/948-3440

Utica MDTA Center
366 Columbus Street
Utica, N.Y. 13501
Tel: 315/724-7196

Manpower Development and Training Center
55 South Denton Avenue
Nassau County
New Hyde Park, N.Y. 11040
Tel: 516/292-1260

Brooklyn Adult Training Center
475 Nostrand Avenue
Brooklyn, N.Y. 11216
Tel: 212/638-2635

Williamsburg Adult Training Center
45 Arion Place
Brooklyn, N.Y. 11206
Tele: 212/452-2743

New York City Adult Training Center
45 Rivington Street
New York, N.Y. 10002
Tel: 212/777-3108

Manpower Development and Training Center
87 Chenango Street
Binghamton, N.Y. 13901
Tel: 607/722-8414

Jamaica Adult Training Center
9114 Merrick Boulevard
Jamaica, N.Y. 11432
Tel: 212/523-4333

Mid-Manhattan Adult Training Center
212 West 120th Street
New York, N.Y. 10027
Tel: 212/666-1920

MDTA Center
45 Columbia Street
Albany, N.Y. 12207
Tel: 518/436-4871

MDTA Center
Board of Education
1325 Main Street
Buffalo, N.Y. 14209
Tel: 716/885-8972

New Jersey

Jersey City MDT Skills Center
760 Montgomery Street
Jersey City, N.J. 07306
Tel: 201/434-0157

Newark Manpower Skill Center
187 Broadway
Newark, N.J. 07104
Tel: 201/648-2449

MDTA Multi Skill Center
942 Prospect Street
Trenton, N.J. 08618
Tel: 609/392-7192

Camden MDTA Skills Center
17th & Admiral Wilson Boulevard
Camden, N.J. 08105
Tel: 609/964-3467

Cumberland County Manpower Training Center
158 Weymouth Road
Vineland, N.J. 08360
Tel: 609/691-8111

Puerto Rico

San Juan Manpower Skill Center
GPO Box 4247
San Juan, P.R. 00905

REGION III

Delaware

Wilmington Manpower Skills Center
1401 Market Street
Wilmington, Del. 19801
Tel: 302/429-7451

Virginia

Southside Manpower Training Skill Center
Box 258
Nottoway County
Crewe, Va. 23930
Tel: 703/645-7471

Wise County Manpower Training Skills Center
P.O. Box 576
Wise, Va. 24293
Tel: 703/328-8413

Washington County Manpower Training Skills Center
Route 4
Abingdon, Va. 24210
Tel: 703/628-6641

Norfolk City Manpower Training Skills Center
Norfolk, Va. 23501
Tel: 703/855-7165

Pennsylvania

John F. Kennedy Center for Vocational Education
734 Schuylkill Avenue
Philadelphia, Pa. 19146
Tel: 215/546-7300

Connelly Vocational Technical Skills Center
1501 Bedford Avenue
Pittsburgh, Pa. 15219
Tel: 412/566-1795

REGION IV

Georgia

Atlanta Manpower Skill Center
232 Pryor Street, SW.
Atlanta, Ga. 30303
Tel: 404/523-6675

Alabama

Birmingham MDTA Education Center
3420 2d Avenue
North Birmingham, Ala. 35234
Tel: 205/322-0504

South Carolina

Charleston MDT Skill Center
P.O. Box 5272
North Charleston, S.C. 29406
Tel: 803/747-5272

MDTA Center
Richmond-Lexington
c/o State Trade School
620 Sunset Boulevard
West Columbia, S.C. 29406
Tel: 803/758-3368

Florida

Miami Skill Center
3240 NW., 27th Avenue
Miami, Fla. 33142
Tel: 305/693-2490
305/358-4925

Tennessee

MDTA Skill Center
591 Washington Street
Memphis, Tenn. 38105
Tel: 901/527-6555

Mississippi

Manpower Training Center
P.O. Box 6667, Handsboro Station
Lorraine Road
Gulfport, Miss. 39501
Tel: 601/863-6772

REGION V

Indiana

Indiana Vocational Technical College
Weir Cook Division
6800 West Raymond Street
Indianapolis, Ind. 46241
Tel: 317/244-7631

Manpower Training Center
1534 W. Sample Street
South Bend, Ind. 46619
Tel: 219/288-4451

Area Industrial Institute
2000 N. Sixth Avenue
Evansville, Ind. 47717
Tel: 812/422-5777

Minnesota

Duluth Comprehensive Facility
1600 London Road
Duluth, Minn. 55812
Tel: 218/728-5107

Occupational Skills Training Center
2908 Colfax Avenue S.
Minneapolis, Minn. 55408
Tel: 612/827-3661

St. Paul Area Skills Center
235 Marshall Avenue
St. Paul, Minn. 55102
Tel: 612/227-9121

Michigan

McNamara Skills Center
1501 Beard Street
Detroit, Mich. 48209
Tel: 313/841-7320

Muskegon Area Skill Training Center
1183 E. Laketon Avenue
Muskegon, Mich. 49442
Tel: 616/726-3701

Ohio

Youngstown Skills Center
20 W. Wood Street
Youngstown, Ohio 44503
Tel: 216/747-2649

Akron Manpower Development and Training Center
147 Park Street
Akron, Ohio 44309
Tel: 216/253-5142

Stowe Adult Center
635 West Seventh Street
Cincinnati, Ohio 45203
Tel: 513/621-7010

Manpower Training Center
2640 East 31st Street
Cleveland, Ohio 44115
Tel: 216/579-1130

MDTA Adult Education and School
Services Center
52 Starling Street
Columbus, Ohio 43215
Tel: 614/228-3821

Southern Ohio Manpower and Technical
Training Center
South and Main Streets
Jackson, Ohio 45640
Tel: 614/286-4145

Garfield Training Center
1340 W. Fifth Street
Dayton, Ohio 45407
Tel: 513/223-4610

Illinois

Carbondale Manpower Training Center
Ordill Area
Southern Illinois University
Carbondale, Ill. 62901
Tel: 618/997-3381

East St. Louis Center
3360 Missouri Avenue
East St. Louis, Ill. 66205
Tel: 618/271-6777

Wisconsin

Milwaukee Technical College Skill Center
1015 North Sixth Street
Milwaukee, Wis. 53203
Tel: 414/278-6600

REGION VI

Arkansas

Little Rock Skills Center
14th and Scott Streets
Little Rock, Ark. 72202
Tel: 501/376-3136

New Mexico

Albuquerque Skills Center
525 Bueno Vista, SE.
Albuquerque, N. Mex. 87712
Tel: 505/842-3541

Oklahoma

Oklahoma City Skill Center
108 NE. 48th Street
Oklahoma City, Okla.
Tel: 405/524-2319

Rural Skills Center
Box 478
Sulphur, Okla. 73806
Tel: 405/622-2173

Texas

San Antonio Skills Center
1117 East Commerce Street
San Antonio, Tex. 78207
Tel: 512/224-2091

Fort Worth MDTA Skills Center
1101 West Vickery Boulevard
Fort Worth, Tex. 76104
Tel: 817/336-5173

Texas Lamar Skills Center
1403 Corinth Street
Dallas, Tex. 75201
Tel: 214/421-7636

Houston Independent School District
MDTA-CEP Education Building
2704 Leeland Street
Houston, Tex. 77003
Tel: 713/224-9686

REGION VII

Iowa

Des Moines Comprehensive Vocational Facility
2403 Bell Avenue
Des Moines, Iowa 50321
Tel: 515/243-5133

Kansas

Manpower Training Skill Center
1333 Washington Boulevard
Kansas City, Kans.
Tel: 913/621-3100

Missouri

SEMO Skills Center
229 Westgate
Sikeston, Mo. 63801
Tel: 314/471-5440

Manpower Development and Training
Skill Center
2323 Grand Avenue
Kansas City, Mo. 64108
Tel: 816/421-7280

Nebraska

Manpower Training Center
620 N. 48th Street
Lincoln, Nebr. 68510
Tel: 402/434-8275

Manpower Training Center
5002 Dodge Street
Omaha, Nebr. 68132
Tel: 402/556-3350

REGION VIII

Colorado

Denver Manpower Training Center
Community College of Denver
1001 East 62d Avenue
Denver, Colo. 80216
Tel: 303/892-3494

Utah

Utah Skills Center
136 East South Temple
Salt Lake City, Utah 84111
Tel: 801/328-5574

REGION IX

Arizona

Maricopa County Skills Center
246 South First Street
Phoenix, Ariz. 85004
Tel: 602/258-2661

California

Community Skill Center
15020 South Figueroa Street
Gardena (Los Angeles), Calif. 90247
Tel: 213/770-1210

East Los Angeles Skill Center
1260 S. Monterey Pass Road
Monterey Park (Los Angeles), Calif. 91754
Tel: 213/263-6903

Watts Skills Center
840 E. 111th Place
Los Angeles, Calif. 90059
Tel: 213/564-4451

Pacoima Skills Center
13299 Louvre Street
Pacoima (Los Angeles), Calif. 91331
Tel: 213/896-9558

East Bay Skills Center
1100 67th Street
Oakland, Calif 94608
Tel: 415/658-7356

San Francisco Manpower Training Skills Center
1485 Market Street
San Francisco, Calif. 94103
Tel: 213/626-7860

Hawaii

University of Hawaii
Manpower Training Section
1040 South King Street
Honolulu, Hawaii 96814
Tel: 808/548-5791

Nevada

Southern Nevada Manpower Skills Center
301 S. Highlands, Suite 113
Las Vegas, Nev. 89106
Tel: 702/385-0161

REGION X

Oregon

Portland Community College
Portland MDT Center
Failing School Building
049 South West Porter Street
Portland, Oreg. 97201
Tel: 503/229-5225

Washington

Seattle OIC
2332 East Madison Street
Seattle, Wash. 98102
Tel: 206/442-1156

appendix B area manpower institutes for the development of staff— AMIDS

SOUTHEAST AMIDS
P.O. Box 11073
Montgomery, Ala. 36111
Tel: 205/288-7002

States Served:
Arkansas, Louisiana, Mississippi, Alabama, Georgia, South Carolina, Florida, and Tennessee

SOUTHWEST AMIDS
1003 Wilshire Boulevard
Santa Monica, Calif. 90401
Tel: 213/825-1406

States Served:
Nevada, Utah, Arizona, California, Hawaii and Trust Territory of the Pacific Islands

MID-ATLANTIC AMIDS
4100 Connecticut Avenue, NW.
Washington, D.C. 20008
Tel: 202/629-7504, 05, or 06
Tennessee

States Served:
West Virginia, Maryland, District of Columbia, Delaware, North Carolina, Virginia, New Jersey, and Pennsylvania

NORTH CENTRAL AMIDS
4711 Woodward Drive
Detroit, Mich. 48201
Tel: 313/833-2141

States Served:
Michigan, Indiana, Ohio, and Kentucky

CENTRAL AMIDS
Suite 20, Lincoln Level
1545 Lincoln Boulevard
Oklahoma City, Okla. 73105
Tel: 405/521-1687

States Served:
Kansas, Oklahoma, Texas, New Mexico,
Missouri, and Colorado

NORTHWEST AMIDS
317 S.W. Alden St.
Loyalty Building, 3d Floor
Portland, Oreg. 97204
Tel: 503/224-3650

States Served:
Washington, Montana, Idaho, Wyoming,
Oregon, and Alaska

NORTHEAST AMIDS
Colonial Hilton Hotel
1150 Narragansett Boulevard, Room L-16
Cranston, R.I. 02905
Tel: 401/467-2667

States Served:
New Hampshire, Massachusetts, Connecticut,
New York, Vermont, Rhode Island, Maine,
Puerto Rico, and the Virgin Islands

UPPER MID-WEST AMIDS
The William Hood Dunwoody Industrial Institute
818 Wayzata Boulevard
Minneapolis, Minn. 55403
Tel: 612/374-5800

States Served:
Minnesota, North Dakota, South Dakota,
Nebraska, Iowa, Wisconsin, and Illinois

appendix C
statistical tables

Table number

MDTA Program Data

A–1 Enrollment opportunities and Federal funds authorized under the MDTA, by fiscal year and program, 1963–71
A–2 Estimated enrollments, completions, and posttraining employment for institutional and on-the-job training programs under the MDTA, fiscal years 1963–71
A–3 Enrollment opportunities authorized and Federal funds obligated for MDTA training programs, by State, fiscal year 1971
A–4 Number of persons enrolled in MDTA institutional projects at the end of December 1970, March, June, September, and December 1971, by HEW region and by State

Selected Characteristics of Persons Enrolled in MDTA

Institutional projects

B–1 Fiscal years 1963–71
B–2 During fiscal year 1971: By sex and age
B–3 During fiscal year 1971: By race and sex
B–4 During fiscal year 1971: By years of school completed
B–5 During fiscal year 1971: By HEW region and by State
B–6 During fiscal year 1971: Individual referrals, by sex and age
B–7 During fiscal year 1971: Spanish-surnamed, by sex and age
B–8 During fiscal year 1971: Part-time trainees, by sex and age
B–9 During fiscal year 1971: Redevelopment area residents, by sex and age
B–10 During fiscal year 1971: Skills centers trainees, by sex and age
B–11 During fiscal year 1971: Veterans, by sex and age

On-the-job training projects

B–12 During fiscal year 1971: By sex and age
B–13 During fiscal year 1971: By years of school completed

Occupational Objectives of Persons Enrolled in MDTA Institutional Projects During Fiscal Year 1971

C–1 By major occupational category, selected occupations, and sex
C–2 By major occupational category, sex, race, and Spanish surname
C–4 Male veterans by major occupational category, race, and Spanish surname
C–5 Male veterans by major occupational category, years of school completed, and age
C–6 Male veterans by major occupational category and selected occupations

Table number

Earnings of Employed MDTA Institutional Graduates Enrolled During Calendar Year 1970

D–1 Median earnings and percentage distribution of posttraining hourly earnings by major occupational group and selected occupations
D–2 Comparison of pretraining and posttraining earnings
D–3 Posttraining and pretraining earnings by sex and race
D–4 Posttraining and pretraining earnings by socioeconomic and family status

NOTE: Individual items in the tables may not add to totals because of rounding.
All tables in appendix C are based on those reports which described characteristics of trainees enrolled during fiscal year 1971 that were acceptable for tabulation. The data covered 85 percent of the total estimated institutional enrollment and 57 percent of the total estimated on-the-job enrollment.

TABLE A-1. Enrollment opportunities and Federal funds authorized under the MDTA, by fiscal year and program, 1963-71

Fiscal year	MDTA total	Institutional			On-the-Job and [1] Jobs Optional Program
		Total	Regular	Part-time	
Enrollment opportunities:					
Total	1,822,100	1,169,400	1,128,800	40,600	652,700
1971 [2]	213,700	144,500	131,500	13,000	69,200
1970 [2]	211,200	147,200	137,300	9,900	64,000
1969 [2]	198,500	120,700	110,900	9,800	77,800
1968 [2]	229,900	131,100	123,600	7,500	98,800
1967	270,900	126,400	126,000	400	144,500
1966	281,100	163,000	163,000	....	118,100
1965	231,800	167,100	167,100	....	64,700
1964	125,800	112,500	112,500	....	13,300
1963	59,200	56,900	56,900	....	2,300
Federal obligations (000):					
Total	$2,363,948	$1,935,240	$1,904,414	$30,826	$428,708
1971 [2]	335,752	275,467	263,936	11,531	60,285
1970 [2]	336,580	287,031	277,138	9,893	49,549
1969 [2]	272,616	213,505	207,795	5,710	59,111
1968 [2]	296,418	221,847	218,251	3,596	74,571
1967	298,247	215,588	215,492	96	82,659
1966	339,649	281,710	281,710	....	57,939
1965	286,505	249,348	249,348	....	37,157
1964	142,111	135,525	135,525	....	6,586
1963	56,070	55,219	55,219	....	851

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[1] Includes MDTA-OJT program which ended in FY 1970 (except for national contracts) and Jobs Optional Program (JOP) which began in FY 1971.

[2] Excludes enrollment opportunities and obligations made available to the Neighborhood Youth Corps by MDTA supplemental funds:

Enrollments	FY	Obligations
145,100	1971	$83,296,000
64,500	1970	26,367,800
36,200	1969	7,446,000
49,100	1968	12,881,000

TABLE A-2. Estimated enrollments, completions, and posttraining employment for institutional and on-the-job training programs under the MDTA, fiscal years 1963-71

Item	Fiscal Year									
	Total	1971	1970	1969	1968	1967	1966	1965	1964	1963
					Total					
Enrollments	1,678,700	227,300	221,000	220,000	241,000	265,000	235,800	156,900	77,600	34,100
Completions	1,123,100	135,900	147,000	160,000	164,200	192,600	155,700	96,300	51,300	20,100
Posttraining Employment	878,500	105,100	115,300	124,000	127,500	153,700	124,000	73,400	39,400	16,100
					Institutional training[1]					
Enrollments	1,134,000	155,600	130,000	135,000	140,000	150,000	177,500	145,300	68,600	32,000
Completions	742,000	90,300	85,000	95,000	91,000	109,000	117,700	88,800	46,000	19,200
Posttraining Employment	550,200	65,900	62,000	71,000	64,500	80,000	89,800	66,900	34,800	15,300
					On-the-job training					
Enrollments	544,700[2]	71,700[2]	91,000	85,000	101,000	115,000	58,300	11,600	9,000	2,100
Completions	381,100	45,600	62,000	65,000	73,200	83,600	38,000	7,500	5,300	900
Posttraining Employment	328,300	39,200	53,300	53,000	63,000	73,700	34,200	6,500	4,600	800

[1] Includes part-time and other training.

[2] Includes 16,800 enrollees in the Jobs Optional Program and excludes 27,500 apprenticeship outreach enrollees.

Note: Completions do not include dropouts. Posttraining employment includes persons employed at the time of the last followup.

TABLE A-3. Enrollment opportunities authorized and Federal funds obligated for MDTA training programs, by State, fiscal year 1971

State	Enrollment opportunities			Federal funds obligated (000)[1]		
	Total	Institutional and part-time	JOP and OJT[2]	Total[3]	Institutional and part-time	JOP and OJT[2]
TOTALS	213,700	144,500	69,200	$335,752	$275,467	$60,285
Alabama	2,700	1,300	1,400	4,042	3,445	597
Alaska	800	600	200	2,175	2,031	144
Arizona	2,100	1,700	400	5,154	4,929	225
Arkansas	1,900	800	1,100	3,995	3,343	652
California	18,500	12,600	5,900	37,678	32,453	5,225
Colorado	3,000	2,400	600	4,845	4,477	368
Connecticut	4,300	3,200	1,100	4,871	4,116	755
Delaware	600	600	(4)	1,196	1,144	52
District of Columbia	1,200	600	600	16,133	8,803	7,330
Florida	3,800	3,200	600	5,620	5,166	454
Georgia	10,300	8,800	1,500	6,039	5,312	727
Guam	300	300	(4)	216	198	18
Hawaii	700	500	200	1,257	1,183	74
Idaho	700	600	100	1,744	1,601	143
Illinois	6,800	5,000	1,800	13,331	11,019	2,312
Indiana	4,400	2,700	1,700	4,910	4,174	736
Iowa	2,600	1,400	1,200	4,249	3,593	656
Kansas	3,100	2,700	400	3,397	2,972	425
Kentucky	3,500	1,800	1,700	4,378	3,758	620
Louisiana	2,600	1,400	1,200	4,911	4,016	895
Maine	1,100	900	200	1,465	1,225	240
Maryland	2,600	1,500	1,100	4,493	3,809	684
Massachusetts	5,000	3,300	1,700	9,163	7,932	1,231
Michigan	11,400	8,700	2,700	12,438	10,535	1,903
Minnesota	2,700	2,300	400	6,951	6,227	724
Mississippi	2,300	1,800	500	4,013	3,580	433
Missouri	6,100	4,400	1,700	7,384	6,538	846
Montana	900	800	100	1,937	1,860	77
Nebraska	1,100	600	500	1,952	1,701	251
Nevada	900	600	300	1,273	1,136	137
New Hampshre	800	600	200	1,038	901	137
New Jersey	12,000	8,300	3,700	12,353	10,428	1,925
New Mexico	1,400	600	800	1,894	1,609	285
New York	10,500	5,200	5,300	35,573	23,996	11,577
North Carolina	5,100	4,300	800	5,302	4,802	500
North Dakota	600	400	200	1,243	1,076	167
Ohio	8,700	7,000	1,700	12,091	10,366	1,725
Oklahoma	3,100	2,400	700	3,886	3,392	494
Oregon	1,600	1,100	500	3,415	2,907	508
Pennsylvania	9,400	6,000	3,400	15,398	13,172	2,226
Puerto Rico	4,500	2,900	1,600	6,235	5,392	843
Rhode Island	800	700	100	1,688	1,487	201
South Carolina	3,200	1,900	1,300	3,606	3,012	594
South Dakota	900	700	200	1,316	1,164	152
Tennessee	2,700	1,300	1,400	5,159	4,475	684
Texas	15,100	11,400	3,700	15,175	13,156	2,019
Utah	1,100	900	200	2,555	2,337	218
Vermont	1,000	900	100	1,248	1,086	162
Virginia	4,400	3,300	1,100	6,027	4,171	1,856
Virgin Islands	(4)	(4)	(4)	99	81	18
Washington	4,500	3,600	900	5,724	5,034	690
West Virginia	2,500	1,200	1,300	5,094	1,849	3,245
Wisconsin	3,500	2,100	1,400	6,497	5,542	955
Wyoming	300	200	100	1,163	1,011	152
American Samoa	200	200		172	172	—
Trust Territories of the Pacific Islands	200	200	(4)	118	100	18

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[1] Excludes funds for supportive services as follows: institutional training, $56,501,000; on-the-job training, $399,000.

[2] Total includes 7,600 enrollment opportunities for national contracts not distributed by State. Also included are 30,500 enrollment opportunities for national contracts which are shown in the State of training, the Federal obligations for which are shown in the State in which the contract was signed.

[3] Total includes $474,962 in contracts from the national office; not available by State.

[4] Less than 50.

TABLE A-4. Number of persons enrolled in MDTA institutional projects at the end of December 1970, March, June, September, and December 1971, by HEW region and by State[1]

HEW region and State	December 1970	March 1971	June 1971	September 1971	December 1971
U.S. Totals	52,082	60,543	61,544	56,380	53,123
I. Boston					
Connecticut	604	721	865	824	816
Maine	161	267	239	293	272
Massachusetts	1,712	2,268	1,977	1,560	1,191
New Hampshire	222	252	263	247	221
Rhode Island	244	422	414	338	302
Vermont	237	341	173	131	238
Total	3,180	4,271	3,931	3,393	3,040
II. New York City					
New Jersey	3,194	3,186	2,971	2,747	2,201
New York	4,664	5,319	4,804	4,714	5,068
Puerto Rico	1,287	1,336	1,443	1,256	479
Virgin Islands	71	88	76	70	24
Total	9,218	9,929	9,294	8,787	7,772
III. Philadelphia					
Delaware	147	117	267	191	206
District of Columbia	408	1,820	693	634	484
Maryland	863	940	824	909	919
Pennsylvania	2,695	3,024	2,454	1,785	2,166
Virginia	971	914	824	736	779
West Virginia	638	613	449	464	405
Total	5,722	6,199	5,511	4,719	4,959
IV. Atlanta					
Alabama	768	1,053	1,137	1,134	943
Florida	1,093	934	1,106	1,107	1,004
Georgia	1,600	1,742	1,652	1,450	1,371
Kentucky	976	1,115	974	968	656
Mississippi	892	827	970	718	689
North Carolina	984	1,169	1,166	946	966
South Carolina	767	874	719	744	627
Tennessee	830	1,156	1,263	1,028	1,271
Total	7,910	8,870	8,987	8,095	7,527
V. Chicago					
Illinois	2,515	2,430	2,876	2,688	2,961
Indiana	1,035	1,465	1,375	898	645
Michigan	2,384	2,482	3,165	2,871	2,790
Minnesota	1,117	1,052	974	1,367	923
Ohio	2,137	2,949	3,272	3,427	2,510
Wisconsin	1,022	1,237	1,026	1,022	1,254
Total	10,210	1[illegible],615	12,688	12,273	11,083
VI. Dallas—Fort Worth					
Arkansas	567	674	544	643	684
Louisiana	926	1,006	1,004	814	937
New Mexico	327	448	460	334	322
Oklahoma	487	562	711	743	638
Texas	1,817	2,863	3,219	2,891	2,150
Total	4,124	5,553	5,938	5,425	4,731
VII. Kansas City					
Iowa	609	843	833	750	889
Kansas	562	644	801	670	678
Missouri	1,486	1,439	1,251	1,294	1,475
Nebraska	237	450	545	249	418
Total	2,894	3,376	3,430	2,963	3,460
VIII. Denver					
Colorado	609	906	751	599	957
Montana	141	273	174	166	258
North Dakota	228	237	213	194	196
South Dakota	248	265	287	312	298
Utah	504	713	577	615	782
Wyoming	177	227	140	85	161
Total	1,907	2,621	2,142	1,971	2,652
IX. San Francisco					
Arizona	682	773	841	581	540
California	4,031	4,411	5,576	5,552	3,868
Guam	62	86	75	102	128
Hawaii	167	153	211	187	207
Nevada	121	325	325	236	187
American Samoa	N.A.	N.A.	N.A.	76	74
Trust Territory of the Pacific Islands	N.A.	N.A.	45	102	63
Total	5,063	5,748	7,073	6,836	5,067
X. Seattle					
Alaska	209	333	240	149	285
Idaho	375	397	443	338	279
Oregon	568	675	590	596	1,111
Washington	704	956	1,277	835	1,157
Total	1,856	2,361	2,550	1,918	2,832

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[1] As reported in the **Project Status Report,** U.S. Department of Labor.

TABLE B-1. Selected characteristics of persons enrolled in MDTA institutional projects: Fiscal years 1963-71

(Percentage distribution)

Characteristic	Fiscal year of enrollment								
	1971	1970	1969	1968	1967	1966	1965	1964	1963[1]
Total:									
Number	155,600	130,000	135,000	140,000	150,000	177,500	145,300	68,600	32,000
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PERCENT OF TOTAL									
Sex:									
Male	58.5	59.4	55.6	55.4	56.8	58.3	60.9	59.7	63.8
Female	41.5	40.6	44.4	44.6	43.2	41.7	39.1	40.3	36.2
Disadvantaged	66.3	65.2							
Poor	63.4	61.1							
Family income:									
Below $2,000	27.6	28.4							
$2,000-$3,999	34.4	35.9							
$4,000 and over	38.0	35.6							
Head of family	58.1	58.0	56.5	54.6	53.6	53.5	51.8	53.3	62.1
Primary wage earner	73.3	75.2	74.3	72.2	68.7	65.5	56.5	59.3	68.0
Labor force data:									
Gainfully employed:									
Under 3 years	46.1	45.6	45.4	45.3	43.1	39.1	42.8	32.5	22.7
3-9 years	35.2	35.0	33.5	32.8	34.4	37.0	33.7	41.3	45.6
10 years or more	18.7	19.5	21.1	21.9	22.5	23.9	23.5	26.2	31.7
Pretraining status:									
Employed	7.5	6.0							
Underemployed	13.5	15.2	16.9	16.5	15.8	12.7	7.3	7.8	6.7
Unemployed	72.7	73.8	79.6	79.7	80.3	82.3	87.8	90.5	92.1
Family farm worker	.2	.3	.4	.6	.7	1.0	2.3	1.7	1.2
Not in labor force[2]	6.1	4.7	3.1	3.2	3.2	3.5	2.6		
Unemployed last year:									
Under 15 weeks	29.9	32.7							
15-26 weeks	23.2	25.3							
27-52 weeks	46.9	42.1							
Current unemployment:									
Under 15 weeks	49.9	57.3	56.9	55.1	59.5	58.4	56.1	52.1	50.2
15-26 weeks	17.5	17.1	14.4	15.5	13.5	12.6	13.1	14.1	17.6
27 weeks or more	32.7	25.6	28.7	29.4	27.0	29.0	30.8	33.8	32.2
Education:									
Under 8 years	5.4	6.4	9.0	9.2	7.5	6.7	8.1	5.7	3.1
8 years	7.0	8.2	9.8	10.0	10.7	9.6	10.2	8.4	7.6
9-11 years	36.2	38.1	38.8	40.6	38.9	35.7	34.1	33.3	30.0
12 years	45.4	42.7	37.9	34.7	38.0	42.0	41.8	45.2	50.4
Over 12 years	6.0	4.5	4.5	5.5	4.9	6.0	5.8	7.4	8.9
Age:									
Under 19 years	13.8	9.1	12.5	14.9	16.4	15.9	18.3	10.6	6.3
19-21 years	26.1	28.0	25.0	23.6	23.6	22.2	24.3	24.7	19.1
22-34 years	40.2	42.3	38.2	35.5	34.3	35.3	32.4	36.4	43.9
35-44 years	11.4	11.9	14.0	15.2	14.7	15.6	14.9	17.5	20.3
45 years and over	8.5	8.8	10.3	10.8	11.0	11.0	10.1	10.8	10.4
Race:									
Caucasian	55.6	59.2	55.9	50.8	59.1	62.5	67.7	69.9	76.5
Negro	39.3	36.0	39.7	45.4	38.0	35.2	30.1	28.3	21.4
American Indian	2.7	2.6							
Oriental	.4	.5							
Other races	2.0	1.7	4.4	3.8	2.9	2.3	2.2	1.8	2.1
Spanish surname: Total	12.8	12.8							
Mexican-American	52.0	58.2							
Puerto Rican	22.4	23.0							
Other	25.6	18.8							
Public assistance recipient	15.8	12.9	13.4	12.6	12.1	11.2	10.5	9.7	8.1
Unemployment insurance:									
Claimant	9.9	9.1	7.3	8.8	10.0	13.2	16.5	23.0	31.5
Exhaustee	1.5	1.0							
Handicapped	11.1	12.1	10.6	9.3	10.0	8.4	7.4	6.7	7.4
Military service:									
Veteran	23.1	19.6	17.2	17.5	20.5	25.1	27.6	16.3	22.5
Rejectee	3.9	5.2	5.3	5.4	5.8	4.6	3.0	.1	.1
Eligible for allowance	79.6	87.9	80.1	82.1	82.0	78.6	67.3	57.7	66.9

[1] Program became operational August 1962.
[2] Reentrant to the labor force, fiscal years 1965-69.

TABLE B-2. Selected characteristics of persons enrolled in MDTA institutional projects during fiscal year 1971: By sex and age
(Percentage distribution)

Characteristic	Total	Male	Female	Age at enrollment			
				Under 19	19-21	22-44	45 and over
Total:							
Number	155,600	91,000	64,600	21,500	40,600	80,300	13,200
Percent	100.0	58.5	41.5	13.8	26.1	51.6	8.5
PERCENT OF TOTAL							
Sex:							
Male	58.5	100.0		57.3	60.2	59.6	48.1
Female	41.5		100.0	42.7	39.8	40.4	51.9
Disadvantaged	66.3	62.7	71.3	79.1	69.9	62.9	54.7
Poor	63.4	58.9	69.7	76.0	66.5	60.4	50.5
Family income:							
Below $2,000	27.6	25.7	30.3	30.7	33.0	24.4	25.4
$2,000-$3,999	34.4	34.1	34.9	30.8	35.2	36.0	28.6
$4,000 and over	38.0	40.1	34.8	38.4	31.8	39.7	46.0
Head of family	58.1	62.4	52.0	21.1	43.5	73.3	72.5
Primary wage earner	73.3	80.8	62.7	38.9	65.8	84.7	83.7
Labor force data:							
Gainfully employed:							
Under 3 years	46.1	40.7	54.0	93.9	75.2	24.9	8.6
3-9 years	35.2	37.7	31.6	5.2	24.2	50.5	21.3
10 years or more	18.7	21.6	14.4	.2	.6	24.5	70.1
Pretraining status:							
Employed	7.5	9.3	5.0	2.4	6.2	8.9	11.9
Underemployed	13.5	12.7	14.6	9.7	12.5	14.6	16.2
Unemployed	72.7	70.3	76.2	81.2	75.2	70.1	67.2
Family farm worker	.2	.2	.2	.2	.2	.1	.6
Not in labor force	6.1	7.4	4.1	6.5	6.0	6.3	4.1
Unemployed last year:							
Under 15 weeks	29.9	34.4	23.9	27.1	29.5	31.3	27.2
15-26 weeks	23.2	26.3	19.1	20.5	23.4	24.2	21.6
27-52 weeks	46.9	39.2	57.0	52.5	47.0	44.5	51.3
Current unemployment:							
Under 15 weeks	49.9	56.8	40.3	52.1	53.1	48.5	42.3
15-26 weeks	17.5	18.6	16.1	15.4	17.3	18.4	17.2
27 weeks or more	32.7	24.7	43.6	32.5	29.5	33.1	40.5
Education:							
Under 8 years	5.4	6.8	3.4	4.1	2.7	6.1	11.7
8 years	7.0	8.3	5.2	8.5	4.7	7.0	11.8
9-11 years	36.2	37.9	33.9	53.0	37.1	32.7	27.7
12 years	45.4	41.0	51.5	34.1	51.2	46.9	37.1
Over 12 years	6.0	6.0	5.9	.3	4.2	7.4	11.7
Age:							
Under 19 years	13.8	13.5	14.2	100.0	...	...	...
19-21 years	26.1	26.9	25.0		100.0	...	...
22-34 years	40.2	42.4	37.2		...	78.0	...
35-44 years	11.4	10.2	13.0		...	22.0	...
45-54 years	6.3	5.0	8.1		...	...	74.0
55 years and over	2.2	2.0	2.6		...	...	26.0
Race:							
Caucasian	55.6	61.4	47.6	53.7	51.6	55.5	71.2
Negro	39.3	33.3	47.7	41.7	44.2	38.6	24.6
American Indian	2.7	3.0	2.3	2.2	2.0	3.2	2.4
Oriental	.4	.4	.5	.3	.4	.5	.4
Other races	2.0	2.0	2.0	2.0	1.9	2.1	1.3
Spanish surname: Total	12.8	13.6	11.7	14.2	13.3	12.8	9.1
Mexican American	52.0	53.2	50.1	47.4	55.3	52.7	43.1
Puerto Rican	22.4	25.9	16.7	27.8	25.4	20.3	13.1
Other	25.6	20.9	33.2	24.7	19.3	27.0	43.8
Public assistance recipient	15.8	9.6	24.6	14.2	12.5	18.8	11.0
Unemployment insurance claimant	9.9	12.2	6.5	2.1	7.0	12.6	14.9
Unemployment insurance exhaustee	1.5	1.8	1.1	.2	.9	1.9	3.6
Handicapped	11.1	14.3	6.6	6.8	8.4	12.6	17.4
Military service:							
Veteran	23.1	37.3	1.1	2.1	14.7	31.5	31.8
Rejectee	3.9	6.3	.3	1.3	5.4	4.3	1.6
Eligible for allowance	79.6	79.4	80.0	85.2	80.4	77.6	80.2

TABLE B-3. Selected characteristics of persons enrolled in MDTA institutional projects during fiscal year 1971: By race and sex

Characteristic	Caucasian trainees			Negro trainees			Other trainees		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total:									
Number	86,500	55,700	30,800	61,200	30,200	31,000	7,900	4,800	3,100
Percent	55.6	64.4	35.6	39.3	49.4	50.6	5.1	61.0	39.0
PERCENT OF TOTAL									
Sex:									
Male	64.4	100.0		49.4	100.0		61.0	100.0	
Female	35.6		100.0	50.6		100.0	39.0		100.0
Disadvantaged	57.6	55.0	62.2	76.6	73.6	79.6	77.1	76.6	77.9
Poor	56.2	52.4	63.1	72.2	68.5	75.7	73.7	72.8	75.2
Family income:									
Below $2,000	25.8	23.3	30.3	29.3	28.6	29.9	34.2	34.6	33.5
$2,000-$3,999	33.4	33.7	33.2	35.7	34.5	36.8	35.3	36.3	33.6
$4,000 and over	40.8	43.0	36.6	35.0	36.8	33.3	30.5	29.0	33.0
Head of family	62.0	67.6	51.9	52.2	52.8	53.6	58.8	69.3	41.8
Primary wage earner	78.1	85.1	65.3	67.2	73.0	61.4	71.9	84.0	52.3
Labor force data:									
Gainfully employed:									
Under 3 years	41.1	35.8	50.9	52.8	49.4	56.2	48.1	39.3	62.6
3-9 years	37.1	39.2	33.3	32.9	35.5	30.3	32.9	36.5	26.9
10 years or more	21.7	25.0	15.7	14.3	15.0	13.5	19.1	24.3	10.5
Pretraining status:									
Employed	8.7	11.1	4.2	6.3	6.9	5.7	5.7	6.1	5.0
Underemployed	15.4	14.5	17.0	11.1	9.6	12.5	10.8	10.8	10.9
Unemployed	69.1	66.1	74.6	77.3	76.8	77.7	76.6	75.2	79.0
Family farm worker	.2	.3	.1	.2	.2	.2	.3	.4	.2
Not in labor force	6.6	8.0	4.1	5.2	6.5	3.9	6.6	7.5	5.0
Unemployed last year:									
Under 15 weeks	32.3	36.4	25.8	26.8	31.8	22.0	26.2	29.0	21.9
15-26 weeks	24.6	27.2	20.3	21.7	25.2	18.2	22.6	25.8	17.7
27-52 weeks	43.2	36.4	53.9	51.5	43.0	59.8	51.2	45.2	60.4
Current unemployment:									
Under 15 weeks	53.5	59.1	44.2	44.9	53.4	36.3	48.8	54.4	39.7
15-26 weeks	17.5	18.4	15.9	17.6	18.9	16.3	18.2	19.2	16.5
27 weeks or more	29.0	22.5	39.9	37.5	27.8	47.4	33.0	26.3	43.8
Education:									
Under 8 years	6.1	7.4	3.8	3.3	4.2	2.5	10.8	13.0	7.4
8 years	8.4	9.7	6.1	4.5	5.0	4.0	9.7	10.8	7.9
9-11 years	32.2	33.3	30.4	41.8	46.7	37.1	38.3	38.3	38.3
12 years	45.9	42.5	52.1	46.3	40.3	52.2	34.7	31.2	40.0
Over 12 years	7.3	7.1	7.6	4.0	3.8	4.2	6.5	6.6	6.4
Age:									
Under 19 years	13.2	12.4	14.5	14.5	15.4	13.6	12.1	11.3	13.5
19-21 years	24.3	25.5	22.1	29.4	30.5	28.2	21.5	20.6	23.0
22-34 years	39.1	42.1	33.6	41.3	42.4	40.4	45.6	47.7	42.4
35-44 years	12.6	11.4	14.6	9.5	7.5	11.4	13.7	13.7	13.7
45-54 years	6.1	6.3	11.5	[illegible]	[illegible]	4.9	5.5	[illegible]	6.0
55 years and over	2.8	2.3	3.7	[illegible]	[illegible]	1.5	1.5	[illegible]	[illegible]
Spanish surname: Total	16.1	15.6	17.0	3.0	[illegible]	3.0	[illegible]	[illegible]	[illegible]
Mexican American	[illegible]	[illegible]	[illegible]	1.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Puerto Rican	13.1	[illegible]	[illegible]	13.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Other	20.6	17.6	25.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Public assitance recipient	12.8	9.3	19.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21.0
Unemployment insurance claimant	11.9	14.1	8.0	[illegible]	[illegible]	[illegible]	[illegible]	9.6	3.4
Unemployment insurance exhaustee	1.7	2.0	1.3	1.3	[illegible]	1.0	1.6	2.1	1.0
Handicapped	14.7	17.4	9.9	6.3	9.4	3.3	10.0	13.0	5.3
Military service:									
Veteran	28.1	41.9	1.6	16.5	30.8	.6	19.1	29.8	1.0
Rejectee	[illegible]	[illegible]	[illegible]	[illegible]	7.1	.3	3.7	5.6	[illegible]
Eligible for allowance	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	75.2	[illegible]	78.7	[illegible]

TABLE B-4. Selected characteristics of persons enrolled in MDTA institutional projects during fiscal year 1971: By years of school completed
(Percentage distribution)

Characteristic	Total	Years of school completed				
		1-4	5-7	8	9-11	12 and over
Total trainees reporting education:	100.0	1.0	4.6	7.0	35.4	52.0
Male	100.0	1.3	5.5	8.2	37.0	48.0
Female	100.0	.5	3.0	5.3	32.8	58.4
Race:	100.0	.9	4.5	7.0	35.5	52.1
Caucasian	100.0	1.1	5.2	8.2	32.2	53.3
Negro	100.0	.5	2.6	4.3	41.2	51.4
American Indian	100.0	2.1	6.7	11.3	42.5	37.4
Oriental	100.0	1.4	8.2	5.8	21.6	63.0
Other	100.0	3.4	10.5	9.4	33.4	43.2
Spanish surname:	100.0	3.2	11.9	10.7	38.6	35.6
Mexican American	100.0	3.7	12.2	10.9	40.2	33.1
Puerto Rican	100.0	3.5	13.1	12.2	37.4	33.8
Other	100.0	1.5	9.7	8.5	35.4	44.8
Age:						
Under 19	100.0	.4	4.2	9.9	54.7	30.8
19-21	100.0	.3	2.7	5.1	39.6	52.4
22-44	100.0	1.0	5.0	6.9	31.4	55.7
45-64	100.0	3.3	8.1	11.2	26.3	51.1
65 and over	100.0	4.6	7.1	8.7	28.5	51.1
Male veteran	100.0	.4	2.8	6.5	27.8	62.6
Handicapped	100.0	1.4	6.3	10.5	34.9	46.9

TABLE B-5. Selected characteristics of persons enrolled in MDTA institutional projects during fiscal year 1971: By HEW region and by State

(Percentage distribution)

HEW region & State	Estimated[1] total enrollment	Male	White	Poor	Primary wage earners	Education		Age		Eligible for allowances	Spanish surname	% Male veterans
						8 and under	12 and over	21 and under	45 and over			
U.S. Totals	155,600	58.5	55.6	63.4	73.3	12.4	51.4	39.2	8.5	79.6	12.8	37.3
I. Boston												
Connecticut	2,500	61.5	58.4	59.6	76.2	23.8	39.6	41.5	8.4	87.6	37.2	24.3
Maine	700	60.5	85.5	58.5	73.5	22.7	50.1	45.4	8.7	92.6	.4	53.4
Massachusetts	5,300	49.5	74.1	52.5	71.8	21.5	41.4	32.7	16.1	85.5	15.0	40.3
New Hampshire	800	47.8	95.0	40.9	81.4	13.5	62.9	36.8	14.0	86.0	.1	44.1
Rhode Island	1,200	58.9	84.5	46.1	57.8	24.0	37.5	41.0	10.6	77.3	2.4	42.5
Vermont	700	52.4	99.8	65.9	75.6	28.9	43.2	31.5	16.3	71.1	1.0	36.9
Total	11,200											
II. New York City												
New Jersey	10,000	58.7	37.1	51.7	62.0	15.9	39.8	44.4	8.2	79.9	12.1	33.8
New York	10,600	57.0	43.8	76.9	64.9	11.9	38.2	47.2	7.8	91.8	15.4	25.7
Puerto Rico	2,800	79.0	40.7	74.0	53.9	20.9	53.9	50.7	2.3	99.1	91.0	15.9
Virgin Islands	(2)											
Total	23,400											
III. Philadelphia												
Delaware	700	67.7	25.4	57.3	54.1	12.1	35.7	40.1	2.4	94.0	1.8	36.2
District of Columbia	1,800	33.1	2.9	84.7	56.7	5.5	51.7	27.2	4.6	29.1	5.2	33.2
Maryland	1,800	41.2	40.8	43.5	65.8	10.6	55.6	30.4	14.4	82.1	12.6	38.1
Pennsylvania	8.700	61.5	45.0	57.3	58.9	8.9	53.4	41.2	6.5	63.4	3.7	43.4
Virginia	2,500	61.0	66.6	57.7	71.5	22.6	47.5	39.9	10.0	80.0	8.4	44.5
West Virginia	1,400	66.6	82.0	62.5	60.6	15.4	57.0	42.2	7.9	84.7	6.1	41.9
Total	16,900											
IV. Atlanta												
Alabama	2,100	64.5	48.4	75.9	63.2	11.7	51.4	44.6	6.5	84.5	1.2	25.2
Florida	3,500	47.3	39.2	60.7	66.8	8.4	55.4	42.4	10.8	87.5	5.8	33.8
Georgia	3,700	67.0	63.8	36.7	81.7	7.2	68.4	41.1	5.2	52.9	4.9	69.9
Kentucky	2,900	60.6	80.0	64.6	61.5	12.1	64.8	49.9	4.1	83.5	3.1	40.0
Mississippi	1,800	72.9	44.8	62.7	78.5	17.1	53.0	38.0	12.7	94.0	1.7	39.1
North Carolina	3,900	75.7	53.0	49.3	81.0	14.3	57.0	43.4	9.2	59.7	1.5	17.9
South Carolina	2,600	63.6	50.7	58.0	65.8	18.4	49.9	42.4	10.3	82.4	1.3	21.8
Tennessee	2,500	53.8	46.9	74.2	66.4	14.2	56.1	46.4	7.3	92.3	2.7	34.1
Total	23,000											
V. Chicago												
Illinois	5,700	50.9	44.0	62.7	71.5	8.6	49.7	41.9	6.8	92.4	10.8	33.6
Indiana	3,400	55.8	53.0	59.4	80.5	14.0	40.8	41.3	10.8	88.0	3.8	35.7
Michigan	4,800	48.5	50.2	60.6	77.3	6.5	64.6	37.3	10.9	90.4	6.2	32.2
Minnesota	3,000	58.0	68.5	75.1	77.6	9.6	47.0	42.5	8.7	84.2	5.0	34.0
Ohio	6,400	50.8	43.8	55.6	69.4	7.2	53.0	39.3	7.8	81.3	3.5	43.4
Wisconsin	2,700	57.5	54.6	79.1	77.7	11.7	47.4	44.5	5.1	90.1	5.3	27.6
Total	26,000											
VI. Dallas-Fort Worth												
Arkansas	1,100	42.0	43.7	65.5	61.0	11.5	51.1	46.2	6.2	75.4	3.5	49.1
Louisiana	1,800	56.4	68.9	60.0	68.4	13.0	58.6	39.7	8.3	88.2	1.2	40.9
New Mexico	1,200	41.5	83.6	87.5	75.8	7.8	61.9	48.0	6.0	94.8	65.8	35.3
Oklahoma	2,700	55.1	52.3	64.8	82.0	10.1	53.7	35.2	10.3	77.6	2.9	52.8
Texas	11,100	55.7	60.6	72.1	80.8	15.8	51.8	37.7	8.5	68.0	34.0	50.5
Total	17,900											
VII. Kansas City												
Iowa	2,000	65.3	85.6	69.0	85.2	12.0	54.2	41.5	8.4	95.9	2.7	39.3
Kansas	1,800	69.0	64.4	54.7	88.9	8.8	62.9	37.0	8.5	58.4	7.9	29.4
Missouri	3,300	60.3	66.8	55.5	90.0	9.9	58.2	28.5	9.2	76.2	3.9	60.1
Nebraska	1,600	43.2	41.2	55.7	62.8	10.8	46.6	44.3	7.7	71.0	6.0	37.9
Total	8,700											
VIII. Denver												
Colorado	2,300	72.1	83.1	44.5	92.2	5.5	69.9	36.6	5.4	53.8	29.8	13.9
Montana	700	57.4	74.6	70.6	90.3	14.9	51.2	28.8	17.1	87.7	5.6	44.2
North Dakota	400	68.1	80.8	72.3	74.7	18.7	40.8	46.0	4.6	95.6	.4	35.7
South Dakota	600	46.9	41.3	79.2	67.7	10.1	60.1	27.0	10.9	85.2	9.6	38.1
Utah	1,000	74.1	75.4	61.9	82.1	8.8	55.5	22.7	14.4	90.7	11.0	38.9
Wyoming	400	59.5	89.6	75.7	95.2	16.1	42.1	30.3	13.0	86.5	17.2	46.4
Total	5,400											
IX. San Francisco												
Arizona	2,700	61.9	59.[illegible]	75.0	71.4	23.3	42.4	36.4	6.7	81.8	35.1	30.6
California	13,100	66.0	60.0	76.1	85.8	10.6	48.9	36.3	7.8	90.2	31.8	28.7
Guam	200	15.0	10.0	83.8	20.0	11.8	35.3	57.5	12.5	87.2	100.0	—
Hawaii	300	38.2	26.6	60.8	50.5	8.0	59.0	48.2	5.8	79.8	8.8	25.6
Nevada	900	50.1	66.6	48.5	91.0	9.5	57.4	32.1	10.8	82.6	12.5	56.2
American Samoa	(2)											
Trust Territory of the Pacific	(2)											
Total	17,200											
X. Seattle												
Alaska	700	54.0	26.3	69.9	78.1	20.8	49.4	32.2	8.5	93.4	.3	35.6
Idaho	900	67.3	83.5	70.3	89.6	15.8	41.4	35.0	7.0	86.1	9.2	46.5
Oregon	1,400	54.1	77.1	82.8	90.8	7.3	58.2	33.8	13.5	92.4	3.5	34.6
Washington	2,800	66.4	60.3	63.3	83.9	10.6	57.1	36.3	10.7	65.9	7.6	49.3
Total	5,800											

[1] Estimated by the U.S. Department of Labor.

[2] Too few reports for reliable estimate.

TABLE B-6. Selected characteristics of persons enrolled in MDTA institutional projects during fiscal year 1971: Individual referrals, by sex and age

(Percentage distribution)

Characteristic	Total	Male	Female	Age at enrollment			
				Under 19	19-21	22-44	45 and over
Total:							
Number	14,000	6,600	7,400	2,000	3,500	7,400	1,100
Percent	100.0	46.9	53.1	14.2	25.0	53.1	7.7
PERCENT OF TOTAL							
Sex:							
Male	46.9	100.0		42.5	51.1	47.8	34.7
Female	53.1		100.0	57.5	48.9	52.2	65.3
Disadvantaged	67.6	66.4	68.7	82.8	75.0	61.3	59.5
Poor	68.4	64.2	72.1	80.8	73.6	64.4	56.4
Family income:							
Below $2,000	29.6	27.0	31.8	31.4	38.6	25.5	25.2
$2,000-$3,999	38.0	36.8	39.0	35.0	36.5	39.6	37.9
$4,000 and over	32.4	36.3	29.3	33.6	25.0	34.9	36.9
Head of family	63.6	67.3	60.4	23.6	48.2	79.5	78.0
Primary wage earner	76.1	82.3	70.6	38.6	68.6	87.9	88.4
Labor force data:							
Gainfully employed:							
Under 3 years	46.9	41.1	51.8	93.9	79.4	24.9	8.1
3-9 years	36.1	36.6	35.7	6.0	20.4	52.7	26.9
10 years or more	17.1	22.2	12.5	.1	.2	22.4	64.9
Pretraining status:							
Employed	4.0	5.1	3.0	2.0	2.6	5.0	5.0
Underemployed	19.5	15.8	22.7	18.0	19.2	19.6	22.3
Unemployed	73.1	75.0	71.5	75.3	75.0	72.1	70.5
Family farm worker	.2	.3	.1	.5	.2	.1	.1
Not in labor force	3.2	3.8	2.8	4.2	3.0	3.3	2.1
Unemployed last year:							
Under 15 weeks	29.1	31.8	26.8	34.6	28.8	27.9	28.1
15–26 weeks	23.9	27.3	20.8	18.5	24.1	25.6	21.3
27-52 weeks	47.0	40.9	52.4	46.9	47.2	46.4	50.7
Current unemployment:							
Under 15 weeks	48.3	53.8	43.0	57.9	51.8	45.1	40.3
15-26 weeks	18.8	20.6	17.1	15.2	18.7	19.9	18.6
27 weeks or more	32.9	25.6	39.9	26.9	29.5	35.0	41.1
Education:							
Under 8 years	1.7	3.0	.6	1.0	.1	2.3	2.5
8 years	4.1	5.6	2.7	3.5	2.2	4.7	6.3
9-11 years	26.7	29.8	24.0	29.4	26.3	27.2	19.8
12 years	60.1	52.4	66.8	65.8	64.4	57.4	54.0
Over 12 years	7.4	9.2	5.9	.3	6.3	8.5	17.4
Age:							
Under 19 years	14.2	12.9	15.4	100.0	—	—	—
19-21 years	25.0	27.2	23.0		100.0		—
22-34 years	40.7	43.2	38.5	—	—	76.7	—
35-44 years	12.4	11.0	13.6		—	23.3	
45-54 years	6.3	4.5	7.9		—	—	81.5
55 years and over	1.4	1.2	1.6	—	—	—	18.5
Race:							
Caucasian	71.4	70.5	72.2	74.1	65.6	70.8	89.4
Negro	24.3	24.0	24.6	22.1	30.5	24.4	8.4
American Indian	2.7	3.7	1.8	2.6	2.6	3.0	1.6
Oriental	.4	.5	.4	.3	.2	.6	.4
Other races	1.1	1.2	1.0	.9	1.1	1.2	.2
Spanish surname: Total	7.8	8.7	7.0	8.3	8.6	7.4	7.1
Mexican American	56.8	63.9	49.0	42.1	64.1	57.7	53.0
Puerto Rican	9.4	10.5	8.1	14.3	10.5	7.9	4.5
Other	33.9	25.7	42.9	43.6	25.4	34.4	42.4
Public assistance recipient	18.0	11.4	23.9	13.2	15.0	22.0	9.4
Unemployment insurance claimant	12.4	17.8	7.6	1.6	7.8	16.1	21.5
Unemployment insurance exhaustee	2.0	2.8	1.4	.3	.6	2.6	6.6
Handicapped	14.9	21.0	9.6	6.3	11.1	17.9	23.0
Military service:							
Veteran	18.5	37.2	1.2	.9	9.5	26.3	25.0
Rejectee	3.4	6.9	.2	.7	5.2	3.6	1.5
Eligible for allowance	91.2	91.2	91.3	93.0	92.9	89.6	93.2

TABLE B-7. Selected characteristics of persons enrolled in MDTA institutional projects during fiscal year 1971: Spanish-surnamed, by sex and age

(Percentage distribution)

Characteristic	Total	Male	Female	Age at enrollment			
				Under 19	19-21	22-44	45 and over
Total:							
Number	19,900	12,400	7,500	3,000	5,400	10,300	1,200
Percent	100.0	62.1	37.9	15.3	27.1	51.6	6.0
PERCENT OF TOTAL							
Sex							
Male	62.1	100.0		60.1	60.9	64.0	56.3
Female	37.9		100.0	39.9	39.1	36.0	43.7
Disadvantaged	80.5	78.5	83.8	86.7	82.4	78.2	76.6
Poor	76.0	73.5	80.1	86.4	79.3	71.9	68.3
Family income							
Below $2,000	30.7	28.4	34.4	34.7	37.3	26.3	29.3
$2,000-$3,999	39.1	39.6	38.1	35.3	37.2	41.7	33.0
$4,000 and over	30.3	32.0	27.5	30.0	25.6	32.0	37.7
Head of family	58.4	65.2	47.0	22.3	42.3	75.3	80.7
Primary wage earner	74.5	81.2	63.4	42.5	66.1	86.6	89.4
Labor force data:							
Gainfully employed							
Under 3 years	48.0	41.1	59.8	92.4	76.7	24.7	10.7
3-9 years	34.5	37.5	29.5	7.3	22.7	49.9	21.3
10 years or more	17.4	21.4	10.7	.3	.6	25.4	68.0
Pretraining status:							
Employed	5.5	6.0	4.5	1.7	4.0	6.8	10.1
Underemployed	11.6	11.2	12.5	7.0	10.1	13.4	15.6
Unemployed	78.2	77.4	79.6	85.0	80.9	75.6	71.6
Family farm worker	.1	.1	.1	.2	.2	.1	
Not in labor force	4.5	5.3	3.2	6.1	4.7	4.1	2.7
Unemployed last year:							
Under 15 weeks	32.2	36.7	24.9	25.9	30.5	35.1	31.8
15-26 weeks	24.3	26.6	20.6	22.5	24.3	25.0	22.9
27-52 weeks	43.5	36.7	54.5	51.6	45.2	39.8	45.3
Current unemployment:							
Under 15 weeks	53.6	59.1	44.3	52.7	56.9	52.5	50.0
16-26 weeks	17.6	18.2	16.6	16.6	16.7	18.6	15.2
27 weeks or more	28.7	22.7	39.2	30.6	26.4	28.9	34.8
Education:							
Under 8 years	14.9	17.0	11.3	10.2	7.9	18.2	30.5
8 years	10.5	11.3	9.2	11.5	8.4	11.0	13.0
9-11 years	37.9	39.8	34.8	54.5	41.2	32.9	23.4
12 years	33.0	28.2	40.8	23.4	40.1	33.0	25.0
Over 12 years	3.7	3.7	3.8	.3	2.4	5.0	8.1
Age:							
Under 19 years	15.3	14.8	16.1	100.0			
19-21 years	27.1	26.6	27.9		100.0		
22-34 years	40.4	42.2	37.3			78.2	
35-44 years	11.2	10.9	11.8			21.8	
45-54 years	4.8	4.4	5.5				79.5
55 years and over	1.2	1.1	1.4				20.5
Race:							
Caucasian	76.0	78.0	73.1	75.0	76.6	76.0	76.3
Negro	10.0	7.9	13.2	12.3	10.7	9.1	8.9
American Indian	1.0	1.0	.8	.8	.5	1.2	1.2
Oriental	.3	.4	.3		.2	.4	.8
Other races	12.7	12.7	12.6	12.0	12.0	13.2	12.8
Spanish surname: Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mexican American	52.0	53.2	50.1	47.4	55.3	52.7	43.1
Puerto Rican	22.4	25.9	16.7	27.8	25.4	20.3	13.1
Other	25.6	20.9	33.2	24.7	19.3	27.0	43.8
Public assistance recipient	15.5	12.6	20.4	15.1	10.2	18.4	16.2
Unemployment insurance claimant	8.7	10.8	5.3	1.9	6.1	11.8	11.7
Unemployment insurance exhaustee	1.7	1.9	1.4	.4	.9	2.4	3.0
Handicapped	6.7	8.7	3.6	3.7	5.0	8.0	11.3
Military service:							
Veteran	13.8	21.5	.4	1.3	8.3	19.6	20.4
Rejectee	4.0	6.1	.2	.6	5.5	4.4	1.0
Eligible for allowance	86.5	87.0	85.5	87.5	87.2	86.1	83.8

TABLE B-8. Selected characteristics of persons enrolled in MDTA institutional projects during fiscal year 1971: Part-time trainees, by sex and age

(Percentage distribution)

Characteristic	Total	Male	Female	Age at enrollment			
				Under 19	19-21	22-44	45 and over
Total:							
Number	12,800	7,400	5,400	700	2,100	7,300	2,700
Percent	100.0	57.9	42.1	5.4	16.2	57.1	21.3
PERCENT OF TOTAL							
Sex:							
Male	57.9	100.0		52.1	52.3	59.7	58.9
Female	42.1		100.0	47.9	47.7	40.3	41.1
Disadvantaged	45.3	40.2	52.4	76.5	65.9	41.6	31.5
Poor	36.9	31.8	45.7	69.4	59.0	33.6	21.6
Family income:							
Below $2,000	16.3	13.9	19.6	31.4	32.1	13.0	10.6
$2,000-$3,999	23.9	20.6	28.8	28.7	33.9	22.8	19.1
$4,000 and over	59.7	65.4	51.6	40.0	34.1	64.1	70.5
Head of family	70.6	86.4	44.6	26.3	48.8	77.3	79.7
Primary wage earner	78.4	93.6	53.2	40.2	66.0	83.3	83.0
Labor force data:							
Gainfully employed:							
Under 3 years	26.6	18.1	40.6	93.5	71.8	16.7	4.5
3-9 years	33.0	32.2	34.3	6.5	27.6	43.4	13.2
10 years or more	40.5	49.7	25.0		.6	39.9	82.3
Pretraining status:							
Employed	32.2	41.5	16.8	7.0	16.8	35.4	40.9
Underemployed	27.6	24.7	32.3	15.6	25.6	28.2	30.3
Unemployed	38.5	32.8	47.9	72.4	56.5	35.2	25.7
Family farm worker	.3	.4	.1	.3	.1		1.3
Not in labor force	1.4	.6	2.8	4.7	1.1	1.1	1.8
Unemployed last year:							
Under 15 weeks	33.5	41.7	24.7	24.9	32.0	35.9	32.6
15-26 weeks	21.8	24.8	18.7	21.8	23.5	22.0	18.9
27-52 weeks	44.6	33.5	56.6	53.3	44.5	42.2	48.5
Current unemployment:							
Under 15 weeks	47.8	54.1	40.3	46.1	54.2	47.5	38.2
15-26 weeks	18.2	19.7	16.4	18.3	18.7	18.5	16.0
27 weeks or more	34.0	26.3	43.3	35.6	27.1	34.0	45.8
Education:							
Under 8 years	5.0	6.6	2.8	2.3	1.6	4.5	9.8
8 years	6.3	7.5	4.6	5.0	3.2	5.2	11.8
9-11 years	28.9	30.4	26.8	52.9	31.9	26.6	26.6
12 years	46.4	41.7	52.8	39.5	53.6	48.5	36.8
Over 12 years	13.5	13.8	13.0	.3	9.8	15.2	15.0
Age:							
Under 19 years	5.4	4.8	6.1	100.0		—	
19-21 years	16.2	14.6	18.4	—	100.0		—
22-34 years	39.4	41.1	37.0	—	—	68.9	—
35-44 years	17.7	17.8	17.7	—	—	31.1	
45-54 years	12.7	13.1	12.2		—	—	59.7
55 years and over	8.6	8.6	8.7	—	—	—	40.3
Race:							
Caucasian	63.0	71.2	51.6	56.1	51.4	62.9	73.6
Negro	32.3	24.4	43.2	40.4	43.9	31.6	23.2
American Indian	2.3	2.4	2.2	.9	1.8	2.8	1.7
Oriental	.6	.4	.7	—	.6	.7	.3
Other races	1.9	1.6	2.2	2.7	2.2	1.9	1.2
Spanish surname: Total	11.1	10.7	11.7	16.8	14.0	11.6	6.2
Mexican American	59.1	63.6	53.5	57.1	63.6	61.0	43.1
Puerto Rican	18.0	12.9	24.5	25.5	22.7	16.0	15.3
Other	22.9	23.6	22.1	17.3	13.8	23.0	41.7
Public assistance recipient	9.5	4.7	16.1	11.4	10.3	10.8	4.9
Unemployment insurance claimant	7.9	9.9	4.6	2.4	5.9	8.6	9.0
Unemployment insurance exhaustee	1.1	1.4	.7	.3	.8	1.2	1.6
Handicapped	5.8	7.7	3.2	3.4	5.0	5.9	6.6
Military service:							
Veteran	30.8	47.9	1.2	2.9	13.9	35.7	37.6
Rejectee	3.7	5.7	.2	1.2	4.7	3.9	2.7
Eligible for allowance	85.1	81.8	90.8	92.0	84.3	84.4	85.7

TABLE B-9. Selected characteristics of persons enrolled in MDTA institutional projects during fiscal year 1971: Redevelopment area residents, by sex and age

(Percentage distribution)

Characteristic	Total	Male	Female	Age at enrollment: Under 19	19-21	22-44	45 and over
Total:							
Number	5,400	3,560	1,840	710	1,310	3,030	350
Percent	100.0	65.9	34.1	13.1	24.3	56.0	6.5
PERCENT OF TOTAL							
Sex:							
Male	65.9	100.0		63.9	64.6	67.1	64.6
Female	34.1		100.0	36.1	35.4	32.9	35.4
Disadvantaged	74.9	74.3	76.1	76.6	79.6	73.4	67.7
Poor	70.7	68.8	74.4	73.1	74.1	69.5	64.0
Family income:							
Below $2,000	31.1	31.2	30.7	32.0	38.6	28.6	24.1
$2,000-$3,999	34.2	32.3	37.6	31.8	31.9	35.5	36.6
$4,000 and over	34.7	36.5	31.6	36.3	29.4	35.9	39.2
Head of family	56.5	64.6	41.0	20.4	36.8	71.0	78.5
Primary wage earner	71.2	80.4	53.4	38.7	59.3	82.2	86.0
Labor force data:							
Gainfully employed:							
Under 3 years	45.4	38.0	59.8	93.4	78.1	24.2	9.0
3-9 years	33.7	35.5	30.1	6.6	21.2	47.4	17.1
10 years or more	21.0	26.5	10.1	...	.7	28.4	73.9
Pretraining status:							
Employed	7.0	8.7	3.7	2.0	3.8	8.3	18.2
Underemployed	9.6	8.8	11.1	9.6	9.9	9.7	7.4
Unemployed	78.9	79.2	78.3	84.1	83.3	77.0	68.2
Family farm worker	.7	1.0	.1	.5	.2	.7	3.4
Not in labor force	3.8	2.3	6.8	3.8	2.9	4.3	2.7
Unemployed last year:							
Under 15 weeks	29.2	33.1	21.8	26.1	30.1	29.8	26.3
15-26 weeks	25.9	28.7	20.8	23.0	25.9	26.9	23.7
27-52 weeks	44.9	38.2	57.4	50.8	44.0	43.3	50.0
Current unemployment:							
Under 15 weeks	53.4	59.4	42.0	57.6	57.2	51.7	43.2
15-26 weeks	17.7	18.6	16.0	14.7	16.4	19.1	17.6
27 weeks or more	28.9	21.9	42.1	27.8	26.4	29.1	39.2
Education:							
Under 8 years	10.8	12.5	7.5	7.3	7.2	12.1	20.5
8 years	8.3	9.4	6.1	8.5	4.5	9.1	15.1
9-11 years	35.7	36.1	34.9	44.0	35.8	34.0	32.6
12 years	40.6	36.5	48.7	39.4	48.3	39.3	26.2
Over 12 years	4.6	5.6	2.7	.8	4.2	5.5	5.7
Age:							
Under 19 years	13.1	12.7	13.9	100.0	...	...	...
19-21 years	24.3	23.9	25.3	...	100.0	...	...
22-34 years	43.8	45.1	41.3	...	...	78.2	...
35-44 years	12.2	11.9	12.7	...	...	21.8	...
45-54 years	5.2	5.1	5.4	...	...	...	79.5
55 years and over	1.3	1.3	1.4	...	...	...	20.5
Race:							
Caucasian	50.8	54.3	43.8	58.9	49.9	48.1	60.5
Negro	31.2	29.3	35.0	33.5	37.1	29.6	19.2
American Indian	16.2	14.9	19.0	6.3	11.3	20.3	19.2
Oriental	.9	.8	1.0	.5	.9	1.0	1.1
Other races	.9	.7	1.2	.7	1.0	1.0	...
Spanish surname: Total	14.4	14.7	13.8	12.4	18.1	13.9	9.2
Mexican American	73.8	73.1	75.2	74.7	76.0	71.7	82.1
Puerto Rican	16.2	18.7	11.0	18.7	18.1	15.8	...
Other	10.0	8.2	13.8	6.7	5.9	12.5	17.9
Public assistance recipient	13.9	8.3	24.8	12.0	12.6	15.1	12.3
Unemployment insurance claimant	8.9	11.6	3.8	.8	7.0	11.7	8.6
Unemployment insurance exhaustee	1.7	2.0	1.1	.5	.7	2.2	3.6
Handicapped	8.4	10.1	5.1	4.4	8.0	9.2	11.3
Military service:							
Veteran	21.2	31.0	.9	1.6	8.8	29.3	36.1
Rejectee	3.6	5.2	.1	1.0	5.5	3.5	2.0
Eligible for allowance	93.4	95.0	90.4	94.2	94.0	92.8	94.7

TABLE B-10. Selected characteristics of persons enrolled in MDTA institutional projects during fiscal year 1971: Skills Centers trainees, by sex and age

[Percentage distribution]

Characteristic	Total	Male	Female	Age at enrollment: Under 19	19-21	22-44	45 and over
Total:							
Number	26,900	16,140	10,760	4,100	7,700	13,100	2,000
Percent	100.0	60.0	40.0	15.4	28.7	48.6	7.4
PERCENT OF TOTAL							
Sex:							
Male	60.0	100.0		65.2	60.2	60.2	46.6
Female	40.0		100.0	34.8	39.8	39.8	53.4
Disadvantaged	74.6	71.5	79.3	77.9	76.8	73.4	65.3
Poor	71.5	67.8	77.1	75.6	73.8	70.6	61.0
Family income:							
Below $2,000	32.2	30.1	35.5	31.1	36.2	30.3	32.6
$2,000-$3,999	35.9	34.5	37.9	30.1	33.0	39.3	35.7
$4,000 and over	31.9	35.4	26.8	38.9	30.8	30.4	31.7
Head of family	56.6	55.8	57.8	21.8	41.0	74.4	72.5
Primary wage earner	74.6	77.4	70.4	41.6	64.2	88.9	89.9
Labor force data:							
Gainfully employed:							
Under 3 years	50.4	46.0	56.9	94.8	81.2	24.8	8.4
3-9 years	33.2	35.2	30.3	4.9	18.6	52.2	24.1
10 years or more	16.3	18.7	12.8	.3	.3	23.0	67.6
Pretraining status:							
Employed	2.0	2.0	2.0	1.3	1.6	2.2	4.0
Underemployed	9.5	8.3	11.2	8.3	8.2	10.3	11.8
Unemployed	85.9	87.8	83.0	87.0	87.4	85.2	82.3
Family farm worker	.1	.1	.1	.1	.1	.1	—
Not in labor force	2.5	1.8	3.7	3.2	2.6	2.3	2.0
Unemployed last year:							
Under 15 weeks	27.6	31.6	21.4	24.2	27.1	29.3	25.6
15-26 weeks	24.5	27.5	19.9	21.2	23.9	26.1	23.2
27-52 weeks	47.9	40.9	58.7	54.5	49.1	44.6	51.3
Current unemployment:							
Under 15 weeks	48.3	54.1	39.0	49.3	51.5	47.1	41.0
15-26 weeks	18.9	19.8	17.5	16.2	17.8	20.3	20.0
27 weeks or more	32.8	26.0	43.5	34.4	30.7	32.6	38.9
Education:							
Under 8 years	4.9	6.1	3.1	4.3	2.4	5.6	10.7
8 years	7.5	8.9	5.5	9.8	4.8	7.7	12.3
9-11 years	44.1	47.3	39.4	59.0	45.9	40.0	33.3
12 years	40.0	34.5	48.2	26.7	44.4	42.1	36.4
Over 12 years	3.5	3.2	3.9	.2	2.5	4.5	7.4
Age:							
Under 19 years	15.4	16.7	13.4	100.0	—	—	—
19-21 years	28.7	28.8	28.6	—	100.0	—	—
22-34 years	38.1	39.5	36.1	—	—	78.5	—
35-44 years	10.4	9.2	12.2	—	—	21.5	—
45-54 years	6.0	4.5	8.1	—	—	—	81.1
55 years and over	1.4	1.2	1.7	—	—	—	18.9
Race:							
Caucasian	44.7	50.7	35.8	48.5	39.7	44.0	60.3
Negro	51.9	45.6	61.1	48.6	57.2	52.1	35.6
American Indian	1.4	1.5	1.2	.9	1.1	1.7	1.8
Oriental	.5	.5	.6	.2	.4	.6	1.0
Other races	1.6	1.7	1.4	1.9	1.5	1.6	1.3
Spanish surname: Total	13.5	14.7	11.6	16.9	13.3	13.1	9.4
Mexican American	43.0	43.0	42.9	40.3	45.0	43.1	40.9
Puerto Rican	35.3	38.6	29.1	41.1	40.8	31.3	20.1
Other	21.7	18.4	28.0	18.6	14.2	25.7	39.0
Public assistance recipient	18.3	11.7	28.2	14.6	13.9	22.5	14.9
Unemployment insurance claimant	11.0	13.3	7.4	2.1	7.6	14.7	17.7
Unemployment insurance exhaustee	1.9	2.2	1.3	.1	.9	2.6	5.0
Handicapped	11.1	14.2	6.6	6.9	8.3	12.8	20.2
Military Service:							
Veteran	20.1	32.5	.8	2.8	11.3	29.2	30.6
Rejectee	3.6	5.8	.3	1.0	4.8	4.1	1.4
Eligible for allowance	95.6	97.4	92.9	94.8	96.9	95.3	94.1

TABLE B-11. Selected characteristics of persons enrolled in MDTA institutional projects during fiscal year 1971: Veterans, by sex and age

(Percentage distribution)

Characteristic	Total	Male	Female	Male veterans	
				Under 30	Over 30
Total:					
Number	35,950	35,340	610	22,230	13,110
Percent	100.0	98.3	1.7	62.9	37.1
PERCENT OF TOTAL					
Sex:					
Male	98.3	100.0		100.0	100.0
Female	1.7		100.0		—
Disadvantaged	50.9	50.9	52.9	49.7	53.1
Poor	47.0	46.9	52.5	45.0	50.1
Family income:					
Below $2,000	20.7	20.6	28.7	21.8	18.4
$2,000-$3,999	33.7	33.8	30.4	38.4	26.0
$4,000 and over	55.6	45.7	40.9	39.7	55.7
Head of family	73.6	73.9	58.7	65.7	87.9
Primary wage earner	92.9	93.2	74.7	90.6	97.7
Labor force data:					
Gainfully employed:					
Under 3 years	17.8	17.6	25.1	26.2	3.0
3-9 years	49.0	49.0	49.5	67.3	17.7
10 years or more	33.3	33.4	25.5	6.5	79.3
Pretraining status:					
Employed	7.9	7.9	5.8	5.8	11.4
Underemployed	16.3	16.3	15.4	17.9	13.6
Unemployed	64.2	64.1	71.1	62.3	67.1
Family farm worker	.2	.2	—	.1	.3
Not in labor force	11.5	11.5	7.6	13.9	7.6
Unemployed last year:					
Under 15 weeks	37.8	38.1	21.8	41.5	32.7
15-26 weeks	27.7	27.9	19.0	29.0	26.1
27-52 weeks	34.5	34.0	59.1	29.5	41.2
Current unemployment:					
Under 15 weeks	56.4	56.8	34.7	62.0	48.4
15-26 weeks	20.3	20.4	15.5	20.3	20.4
27 weeks or more	23.4	22.9	49.8	17.6	31.2
Education:					
Under 8 years	3.1	3.2	.4	1.4	6.3
8 years	6.5	6.6	1.8	4.3	10.4
9-11 years	27.5	27.8	9.7	27.9	27.6
12 years	54.0	53.8	69.2	58.7	45.4
Over 12 years	8.8	8.7	18.9	7.7	10.3
Age:					
Under 20 years	3.6	3.6	5.2	5.7	—
20-24 years	43.2	43.5	28.2	68.8	—
25-29 years	16.1	16.1	14.9	25.5	—
30-39 years	17.4	17.5	15.1	—	47.4
40-54 years	17.9	17.6	32.8	—	47.8
55 years and over	1.8	1.7	3.8	—	4.7
Race:					
Caucasian	73.1	73.0	76.4	71.7	75.4
Negro	22.9	22.9	20.5	24.7	19.8
American Indian	2.5	2.5	2.7	2.0	3.4
Oriental	.3	.3	.2	.3	.4
Other races	1.2	1.2	.2	1.3	1.0
Spanish surname: Total	8.2	8.2	3.5	8.5	7.8
Mexican American	61.8	61.9	55.6	62.6	60.5
Puerto Rican	20.6	20.7	11.1	22.0	18.2
Other	17.5	17.4	33.3	15.4	21.3
Public assistance recipient	7.4	7.3	13.2	5.6	10.3
Unemployment insurance claimant	19.7	19.7	16.4	19.8	19.7
Unemployment insurance exhaustee	3.1	3.1	1.7	2.3	4.7
Handicapped	16.8	16.9	11.8	12.3	24.7
Eligible for allowance	76.1	76.0	77.8	71.5	84.1

TABLE B-12. Selected characteristics of persons enrolled in MDTA on-the-job training projects during fiscal year 1971: By sex and age

(Percentage distribution)

Characteristic	Total	Male	Female	Age at enrollment			
				Under 19	19-21	22-44	45 and over
Total:							
Number	71,700	52,560	19,140	8,530	16,800	38,700	7,670
Percent	100.0	73.3	26.7	11.9	23.4	53.9	10.7
PERCENT OF TOTAL							
Sex:							
Male	73.3	100.0		73.7	74.6	72.9	72.1
Female	26.7		100.0	26.3	25.4	27.1	27.9
Disadvantaged	51.6	48.7	59.7	62.9	59.7	47.9	39.4
Poor	50.0	47.4	57.4	61.3	57.2	47.1	36.3
Family income:							
Below $2,000	19.9	19.5	21.0	28.2	28.3	15.7	13.8
$2,000-$3,999	28.6	27.8	31.1	25.6	31.1	29.3	23.8
$4,000 and over	51.5	52.7	47.9	46.3	40.6	55.1	62.4
Head of family	61.5	70.4	37.3	26.4	45.9	72.5	79.8
Primary wage earner	73.9	83.7	47.1	44.8	65.2	81.9	85.1
Labor force data:							
Gainfully employed:							
Under 3 years	40.3	35.6	53.7	92.3	71.9	21.9	7.7
3-9 years	35.0	36.2	31.9	7.5	27.5	49.0	11.9
10 years or more	24.6	28.2	14.4	.2	.7	29.1	80.4
Pretraining status:							
Employed	17.7	20.1	11.3	7.7	10.6	20.3	32.2
Underemployed	14.6	14.8	14.3	13.0	12.6	15.6	16.2
Unemployed	64.8	62.8	70.4	73.2	73.7	61.9	50.1
Family farm worker	.2	.2	.1	.2	.2	.2	.3
Not in labor force	2.6	2.1	3.9	5.9	2.9	2.0	1.2
Unemployed last year:							
Under 15 weeks	44.9	50.4	30.2	38.7	42.7	47.7	44.8
15-26 weeks	22.7	24.0	19.0	19.6	22.2	23.3	24.9
27-52 weeks	32.3	25.6	50.8	41.7	35.1	29.0	30.3
Current unemployment:							
Under 15 weeks	61.8	68.3	44.4	60.8	62.8	62.0	59.5
15-26 weeks	15.6	15.7	15.3	13.1	14.9	16.2	17.7
27 weeks or more	22.6	16.0	40.2	26.1	22.2	21.9	22.8
Education:							
Under 8 years	6.7	7.2	5.2	3.0	2.9	7.4	15.2
8 years	8.2	8.4	7.8	5.2	4.4	8.5	18.5
9-11 years	32.8	32.4	34.2	44.4	33.0	31.4	27.1
12 years	44.2	43.7	45.5	46.1	49.6	43.7	32.4
Over 12 years	8.1	8.4	7.4	1.3	10.2	9.0	6.8
Age:							
Under 19 years	11.9	12.0	11.7	100.0	....	....	....
19-21 years	23.4	23.8	22.3		100.0	....	....
22-34 years	41.8	42.5	39.6	....	....	77.4	....
35-44 years	12.2	11.1	15.2	....	....	22.6	....
45-54 years	7.6	7.4	8.3	....	....	....	71.1
55 years and over	3.1	3.2	3.0	....	....	....	28.9
Race:							
Caucasian	66.0	69.6	56.3	68.1	63.6	64.9	74.6
Negro	29.0	25.5	38.7	28.6	31.9	29.3	21.4
American Indian	2.6	2.3	3.2	1.5	2.3	3.1	2.0
Oriental	.7	.7	.4	.4	.6	.7	.7
Other races	1.7	1.9	1.3	1.4	1.6	2.0	1.3
Spanish surname: Total	12.4	12.5	12.3	11.9	13.7	12.8	8.4
Mexican American	52.3	53.5	49.0	57.5	58.7	49.2	44.9
Puerto Rican	25.5	24.9	27.1	23.9	24.1	27.3	19.7
Other	22.2	21.6	23.8	18.6	17.2	23.5	35.5
Public assistance recipient	5.3	3.5	10.2	4.5	4.4	6.2	3.1
Unemployment insurance claimant	7.9	9.2	4.3	1.5	7.2	9.1	11.1
Unemployment insurance exhaustee	1.1	1.1	.9	.2	.7	1.2	2.2
Handicapped	8.1	9.1	5.4	7.3	7.4	8.2	10.3
Military service:							
Veteran	26.8	35.8	.8	1.6	12.8	35.5	41.8
Rejectee	4.9	6.4	.6	2.2	6.8	5.1	2.6
Eligible for allowance	17.4	19.9	10.1	21.2	22.8	16.0	7.9

TABLE B-13. Selected characteristics of persons enrolled in MDTA on-the-job training projects during fiscal year 1971: By years of school completed

(Percentage distribution)

Characteristic	Total	Years of School Completed				
		1-4	5-7	8	9-11	12 & over
Total reporting education	100.0	1.4	5.2	8.2	32.7	52.5
Male	100.0	1.5	5.6	8.3	32.3	52.3
Female	100.0	.8	4.3	7.8	34.0	53.1
Race:	100.0	1.4	5.1	8.1	32.7	52.6
Caucasian	100.0	1.0	5.3	9.2	29.9	54.4
Negro	100.0	1.7	4.4	5.4	38.3	50.2
American Indian	100.0	.8	5.3	10.2	41.8	41.9
Oriental	100.0	4.2	7.2	4.9	21.3	62.4
Other	100.0	7.0	12.0	10.6	31.9	38.4
Spanish surname:	100.0	4.0	11.6	11.0	34.9	38.5
Mexican American	100.0	4.5	13.4	9.2	34.8	38.1
Puerto Rican	100.0	4.4	12.0	15.0	39.4	29.2
Other	100.0	2.4	7.1	10.4	30.1	50.0
Age:						
Under 19	100.0	.3	3.0	5.9	47.4	43.5
19-21	100.0	.3	2.3	4.3	34.1	59.0
22-44	100.0	1.4	5.7	8.2	31.1	53.6
45-64	100.0	4.1	11.0	18.5	27.1	39.4
65 and over	100.0	6.7	10.3	18.6	26.5	37.9
Male veteran	100.0	.5	3.0	7.4	26.7	62.4
Handicapped	100.0	2.0	7.5	10.8	30.7	49.0

TABLE C-1. Persons enrolled in MDTA institutional projects during fiscal year 1971: By major occupational category, selected occupations, and sex
(Percentage distribution)

Major occupational category and selected occupations ¹	Number	Total	Precentage distribution		
			Total	Male	Female
Total enrollees	155.600	100.0	.....	.....	.....
Nonoccupational training and occupation not reported	33,600	21.6	.....	.....	.....
Total reporting occupational skill training	122,000	78.4	100.0	100.0	100.0
Professional, technical, and managerial occupations	20,500	13.2	16.8	10.6	26.6
Architectural and engineering (draftsmen)	6,500	4.2	5.3	6.8	3.4
Medicine and health	11,200	7.2	9.2	1.4	21.5
Clerical and sales occupations	26,700	17.2	22.0	4.7	49.4
Stenography, typing, filing, and related work	16,000	10.3	13.3	1.3	32.4
Computing and account recording	8,700	5.6	7.4	2.7	12.0
Service occupations	15,600	10.0	12.7	7.8	20.6
Food and beverage preparation and service	4,200	2.7	3.4	3.2	3.7
Barbering, cosmetology, and related service	2,300	1.5	1.9	(1)	3.7
Miscellaneous personal service (nurses aide and health attendants)	6,400	4.1	5.2	1.3	11.4
Protective service	1,200	.8	1.0	1.6	(1)
Farming, fishing, forestry, and related occupations	1,500	1.0	1.2	2.0	.1
Processing occupations	500	.3	.4	.6	.1
Machine trades occupations	22,700	14.6	18.7	30.1	.5
Metal machining	6,800	4.4	5.6	9.0	(1)
Mechanics and machinery repairmen	14,500	9.4	11.8	19.3	(1)
Bench work occupations	4,700	3.0	3.8	4.7	2.3
Assembly and repair of electrical equipment	2,600	1.7	2.1	3.2	(1)
Fabrication and repair of textile, leather, and related products	1,200	.8	1.0	(1)	1.7
Structural work occupations	25,400	16.4	20.9	33.9	.2
Metal fabricating	4,500	2.9	3.7	5.9	(1)
Welders, flame cutters, and related occupations	10,700	6.9	8.8	14.3	(1)
Electrical assembling, installing, and repairing	3,100	2.0	2.6	4.2	(1)
Painting, plastering, waterproofing, cementing	(1)	(1)	(1)	1.1	(1)
Excavating, grading, paving, and related work	(1)	(1)	(1)	(1)	(1)
Construction work, not elsewhere classified	3,700	2.4	3.1	5.1	(1)
Structural work, not elsewhere classified	1,700	1.1	1.4	2.3	(1)
Miscellaneous occupations	4,400	2.8	3.5	5.6	.2
Motor freight transportation	1,600	1.0	1.3	2.0	(1)
Production and distribution of utilities (water purification, sewage and waste disposal)	2,000	1.3	1.6	2.6	(1)

¹ Data are shown separately only for those occupations within each major occupational category with 1 percent or more of the trainees.

TABLE C-2. Persons enrolled in MDTA institutional projects during fiscal year 1971: By major occupational category, sex, race, and Spanish surname

(Percentage distribution)

Major occupational category[1]	Total	Sex		Race				Spanish surname			
		Male	Female	Caucasian	Negro	Other races[2]	Race not reported	Total	Mexican American	Puerto Rican	Other
Total reporting occupation	100.0	61.4	38.6	61.5	31.5	4.0	3.0	10.6	5.6	2.3	2.7
Professional, technical, and managerial	100.0	38.8	61.2	67.7	25.5	3.9	2.8	12.0	6.7	2.4	2.8
Clerical and sales	100.0	13.2	86.8	54.7	39.0	3.9	2.3	9.9	5.0	.9	4.0
Service	100.0	37.6	62.4	53.0	39.5	4.4	3.0	9.5	4.8	2.1	2.6
Farming, fishing, and forestry	100.0	95.9	4.1	70.1	14.0	7.9	8.0	27.4	19.8	6.3	1.2
Processing occupations	100.0	91.4	8.6	38.0	33.7	1.1	27.1	31.1	1.1	29.1	.9
Machine trades	100.0	98.9	1.1	66.5	26.7	3.7	3.0	11.7	6.5	2.8	2.3
Bench work	100.0	76.4	23.6	5[illegible]1	38.3	4.1	3.4	12.2	6.1	3.8	2.4
Structural work	100.0	99.6	.4	63.0	29.8	4.0	3.1	8.6	4.0	2.7	1.9
Miscellaneous occupations	100.0	98.2	1.8	75.4	18.5	3.7	2.3	8.5	6.2	.7	1.5
Total reporting occupation	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Professional, technical, and managerial	16.8	10.6	26.6	18.5	13.6	16.5	15.8	18.9	20.1	17.6	17.8
Clerical and sales	22.0	4.7	49.4	19.6	27.2	21.7	16.8	20.5	19.7	8.7	32.6
Service	12.7	7.8	20.6	11.0	16.0	14.1	12.9	11.4	11.0	11.6	12.2
Farming, fishing, and forestry	1.2	1.9	.1	1.4	.6	2.4	3.3	3.2	4.4	3.4	.6
Processing occupations	.4	.6	.1	.2	.4	.1	3.6	1.2	*	5.0	.1
Machine trades	18.7	30.1	.5	20.2	15.8	17.1	18.8	20.5	21.8	22.4	16.2
Bench work	3.8	4.7	2.3	3.3	4.6	3.9	4.4	4.4	4.1	6.2	3.4
Structural work	20.9	33.9	.2	21.4	19.8	20.8	21.7	17.0	15.0	24.1	15.1
Miscellaneous occupations	3.5	5.6	.2	4.3	2.1	3.3	2.7	2.8	3.9	1.1	2.0

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[1] As defined in the Dictionary of Occupational Titles, (third edition), U.S. Department of Labor

[2] Includes: American Indians 2.4 percent; Orientals 0.4 percent; and all other minority races 1.2 percent.

* Less than .05 percent.

TABLE C-3. Persons enrolled in MDTA institutional projects during fiscal year 1971: By major occupational category and selected characteristics

(Percentage distribution)

				Underemployed			Years of school completed				Age at enrollment			
Major occupational category	Total	Disadvantaged	Handicapped	Total	Male	Female	8 and under	9-11	12 and over	Not reported	Under 22	22-44	45 and over	Not reported
Total reporting occupation	100.0	59.8	11.6	15.2	8.6	6.6	3.9	38.3	57.3	.5	34.7	56.0	9.0	.3
Professional, technical, & managerial	100.0	53.4	9.6	24.3	6.9	17.4	2.6	22.9	73.9	.6	30.0	56.4	13.1	.5
Clerical and sales	100.0	65.9	9.8	14.3	2.9	11.5	1.0	29.5	69.1	.4	38.5	52.6	8.6	.3
Service	100.0	66.8	10.0	13.4	4.7	8.8	4.6	47.9	46.9	.5	32.9	54.2	12.4	.4
Farming, fishing, forestry	100.0	79.5	11.8	12.5	12.3	.2	24.0	42.6	31.9	1.6	26.5	52.6	20.6	.3
Processing occupations	100.0	64.0	21.7	10.0	9.4	.6	7.7	38.9	52.6	.9	32.6	60.3	6.3	.3
Machine trades	100.0	59.4	14.6	12.0	11.9	.1	4.7	47.0	47.8	.4	39.1	55.4	5.2	.2
Bench work	100.0	57.4	13.5	14.4	13.0	1.3	4.8	37.6	57.1	.4	30.6	59.5	9.6	.2
Structural work	100.0	57.0	13.0	12.5	12.4	*	5.4	46.7	47.4	.4	36.2	57.9	5.6	.3
Miscellaneous occupations	100.0	39.9	9.5	19.6	19.4	.2	3.8	35.3	60.3	.6	13.7	69.5	16.4	.3
Total reporting occupation	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Professional, technical, & managerial	16.8	15.0	13.9	13.5	26.8	44.0	11.3	10.0	21.6	20.3	14.5	16.9	24.3	23.3
Clerical and sales	22.0	24.2	18.7	7.4	20.7	37.9	5.6	16.9	26.5	19.4	24.4	20.7	20.9	21.9
Service	12.7	14.2	11.1	6.9	11.2	16.8	15.1	15.9	10.4	12.2	12.1	12.4	17.5	14.7
Farming, fishing, forestry	1.2	1.6	1.3	1.8	1.0	*	7.6	1.4	.7	4.1	.9	1.2	2.8	1.0
Processing occupations	.4	.4	.7	.4	.3	*	.8	.4	.4	.7	.4	.4	.3	.3
Machine trades	18.7	18.5	23.6	25.9	14.7	.3	22.7	22.9	15.6	16.7	21.1	18.5	10.8	13.4
Bench work	3.8	3.6	4.4	5.8	3.6	.8	4.6	3.7	3.8	3.3	3.3	4.0	4.1	2.7
Structural work	20.9	19.9	23.5	30.3	17.1	*	28.9	25.5	17.3	18.7	21.8	21.6	12.9	19.2
Miscellaneous occupations	3.5	2.3	2.9	8.0	4.5	.1	3.5	3.2	3.7	4.5	1.4	4.4	6.4	3.4

* Less than .05 percent.

TABLE C-4. Male veterans enrolled in MDTA institutional projects during fiscal year 1971: By major occupational category, race, and Spanish surname

(Percentage distribution)

Major occupational category	Total	Race				Spanish surname			
		Caucasian	Negro	Other races	Race not reported	Total	Mexican American	Puerto Rican	Other
Total reporting occupation	100.0	72.4	21.9	3.7	2.1	7.0	4.2	1.4	1.3
Professional, technical, and managerial	100.0	73.7	19.7	3.4	3.2	9.0	6.3	1.6	1.0
Clerical and sales	100.0	69.8	24.4	4.4	1.4	6.1	3.5	1.3	1.3
Service	100.0	69.5	24.4	4.0	2.0	7.3	4.0	1.7	1.6
Farming, fishing, forestry	100.0	79.8	9.9	9.5	.8	12.2	11.8	....	.4
Processing occupations	100.0	46.4	17.9	.9	34.8	37.5	1.8	35.7	....
Machine trades	100.0	72.6	22.2	3.2	1.9	6.8	4.2	1.3	1.2
Bench work	100.0	68.6	25.3	3.3	2.7	9.9	6.1	2.7	1.1
Structural work	100.0	71.6	23.1	4.0	1.3	5.8	3.1	1.0	1.6
Miscellaneous occupations	100.0	80.7	14.4	2.7	2.2	6.2	4.4	.6	1.1
Total reporting occupation	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Professional, technical, and managerial	10.1	10.3	9.1	9.3	15.9	13.0	15.2	11.3	7.7
Clerical and sales	5.8	5.6	6.4	7.0	3.9	5.1	4.9	5.2	5.6
Service	7.8	7.5	8.7	8.5	7.7	8.2	7.4	9.4	9.1
Farming, fishing, forestry	1.2	1.3	.6	3.2	.5	2.1	3.4	....	.3
Processing occupations	.5	.3	.4	.1	8.8	2.8	.2	12.9	....
Machine trades	28.7	28.9	29.1	25.4	27.2	27.9	29.0	26.5	25.9
Bench work	4.6	4.4	5.3	4.2	6.1	6.6	6.7	8.7	3.8
Structural work	33.8	33.4	35.5	36.7	22.0	27.8	25.2	22.9	41.3
Miscellaneous occupations	7.5	8.3	4.9	5.5	7.9	6.6	7.9	3.2	6.3

TABLE C-5. Male veterans enrolled in MDTA institutional projects during fiscal year 1971: By major occupational category, years of school completed, and age

(Percentage distribution)

Major occupational category	Total	Years of school completed				Age at enrollment			
		8 and under	9-11	12 and over	Not reported	Under 22	22-44	45 and over	Not reported
Total reporting occupation	100.0	2.7	32.4	64.4	.4	12.5	76.1	11.1	.3
Professional, technical, and managerial	100.0	1.3	18.6	79.4	.6	10.5	75.8	13.1	.6
Clerical and sales	100.0	.2	15.2	84.1	.4	15.2	78.3	5.8	.7
Service	100.0	2.6	32.2	64.8	.4	13.5	72.7	13.3	.4
Farming, fishing, forestry	100.0	11.5	42.7	45.4	.4	3.8	69.1	27.1	....
Processing occupations	100.0	.9	24.1	74.1	.9	8.0	84.8	7.1	....
Machine trades	100.0	3.0	36.6	60.1	.4	14.0	76.4	9.2	.4
Bench work	100.0	3.0	21.9	74.7	.4	9.9	76.7	13.3	.1
Structural work	100.0	3.0	37.7	58.9	.4	13.5	76.5	9.8	.3
Miscellaneous occupations	100.0	3.0	30.4	65.9	.6	4.9	75.5	19.5	.1
Total reporting occupation	100.0	100.0	100.0	100.0		100.0	100.0	100.0	
Professional, technical, and managerial	10.1	4.8	5.8	12.5		8.5	10.1	11.9	
Clerical and sales	5.8	.5	2.7	7.6		7.0	6.0	3.0	
Service	7.8	7.4	7.7	7.8		8.4	7.4	9.3	
Farming, fishing, forestry	1.2	5.2	1.6	.9		.4	1.1	3.0	
Processing occupations	.5	.2	.4	.6		.3	.6	.3	
Machine trades	28.7	31.4	32.4	26.8		32.2	28.9	23.9	
Bench work	4.6	5.2	3.1	5.4		3.7	4.7	5.5	
Structural work	33.8	37.1	39.2	30.9		36.5	33.9	29.8	
Miscellaneous occupations	7.5	8.3	7.0	7.7		2.9	7.4	13.2	

TABLE C-6. Male veterans enrolled in MDTA institutional projects during fiscal year 1971: By major occupational category and selected occupations

Major occupational category and selected occupations[1]	Percentage distribution[1]	
Total male veterans		100.0
Nonoccupational training, including no skill reported		13.4
Occupational skill training reported		86.6
Total male veterans reporting occupation of training		100.0
Professional, technical, and managerial occupations		10.0
Architecture and engineering occupations	5.6	
Occupations in medicine and health	1.6	
Clerical and sales occupations		5.8
Stenography, typing, office machine occupations	1.4	
Computing and account recording	3.7	
Service occupations		7.8
Food and beverage preparation	2.8	
Miscellaneous personal service (health service)	1.3	
Protective services	2.7	
Farming, fishing, forestry, and related occupations		1.2
Processing occupations		.5
Machine trades occupations		28.7
Metal machining	8.7	
Mechanics and machinery repairmen	18.9	
Bench work occupations		4.6
Assembly and repair of electrical equipment	3.3	
Structural work occupations		33.8
Metal fabricating	4.8	
Welders	14.7	
Electrical assembling, installing ,and repairing	4.4	
Painting, plastering, waterproofing, and cementing	1.6	
Excavating, grading, paving, and related work	1.0	
Construction work, not elsewhere classified	5.1	
Structural work, not elsewhere classified	2.1	
Miscellaneous occupations		7.5
Motor freight transportation	2.7	
Water purification, sewage, and work disposal	3.6	

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[1] Data are shown in left column only for those occupations in each major occupational category with 1 percent or more of the trainees.

TABLE D-1. Median earnings and percentage distribution of posttraining hourly earnings of employed MDTA institutional graduates enrolled during calendar year 1970, by major occupational group and selected occupations

Occupational group and selected occupations of training	Employed graduates[1]			Posttraining earnings (percentage distribution)								
	Total	Percent	Median earnings	Total	Less than $1.25	$1.25-1.49	$1.50-1.74	$1.75-1.99	$2.00-2.24	$2.25-2.49	$2.50-2.99	$3.00 and over
Total reporting posttraining earnings and occupation of training	8,605	100.0	$2.20	100.0	1.3	2.0	16.9	14.3	18.9	11.1	15.6	19.8
Professional, technical, and managerial	624	7.3	(2)	100.0	.5	.8	5.4	5.8	10.6	6.7	14.4	55.8
Nurses	74	.9	2.70	100.0	....	....	2.7	5.4	12.2	10.6	47.3	21.6
Clerical and sales occupations	1,677	19.5	2.11	100.0	1.0	1.9	18.8	17.9	24.1	13.8	14.2	8.2
Typists	178	2.1	2.10	100.0	....	1.1	21.9	18.0	23.6	14.6	18.0	2.8
Clerks	187	2.2	2.17	100.0	.5	1.1	12.8	16.6	27.3	15.5	18.7	7.5
Service occupations	2,174	25.3	2.02	100.0	2.3	3.4	24.2	18.5	19.2	10.5	11.7	10.2
Hospital attendants	407	4.7	2.12	100.0	.5	1.7	20.4	18.4	18.7	15.0	17.0	8.4
Food preparation and services	162	1.9	1.98	100.0	1.9	4.3	24.7	21.0	21.0	7.4	10.5	9.3
Farm, fishery, and forestry occupations	242	2.8	2.06	100.0	2.5	4.1	21.9	16.5	19.8	10.7	14.9	9.5
Processing occupations	322	3.7	2.23	100.0	1.2	2.8	17.4	14.6	15.5	14.6	16.1	17.7
Machine trades occupations	746	8.7	2.46	100.0	.6	1.5	9.5	10.1	17.0	13.3	19.2	28.8
Production machine operator	39	.5	1.38	100.0	2.6	2.6	5.1	5.1	28.2	12.8	23.1	20.5
Auto mechanics	123	1.4	2.48	100.0	.8	1.6	14.6	7.3	14.6	12.2	21.1	27.6
Bench work occupations	650	7.6	2.10	100.0	1.5	1.8	20.6	17.2	21.5	10.5	16.2	10.6
Electronic assemblers	40	.5	2.30	100.0	....	....	12.5	10.0	25.0	12.5	22.5	17.5
Structural work occupations	823	9.6	2.67	100.0	.8	.7	8.5	7.9	15.3	10.3	19.3	37.1
Welders	108	1.3	2.69	100.0	....	....	4.6	8.3	17.6	12.0	19.4	38.0
Miscellaneous occupations	1,347	15.7	2.34	100.0	.7	1.3	14.6	11.5	18.3	9.4	19.9	24.2

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[1] Includes only those employed graduates reporting both occupation of training and posttraining earnings.

[2] 55.8 percent received a wage of $3.00 or more an hour, actual amounts not recorded.

TABLE D-2. Comparison of pretraining and posttraining earnings[1] of a sample of MDTA institutional graduates enrolled during calendar year 1970

Straight-time average hourly earnings before training[2]	Total	Posttraining earnings							
		Less than $1.25	$1.25–1.49	$1.50–1.74	$1.75–1.99	$2.00–2.24	$2.25–2.49	$2.50–2.99	$3.00 and over
Total number	9,054	125	175	1,536	1,325	1,753	1,003	1,400	1,737
Less than $1.25	862	42	45	282	164	131	76	73	49
$1.25–$1.49	1,003	18	56	313	203	188	76	88	61
$1.50– 1.74	2,033	31	42	533	400	466	198	219	144
$1.75– 1.99	1,188	7	15	169	274	290	155	155	123
$2.00– 2.24	1,336	13	9	121	146	358	208	256	225
$2.25– 2.49	563	2	2	35	55	102	114	133	120
$2.50– 2.99	928	6	5	47	49	114	102	302	303
$3.00 and over	1,141	6	1	36	34	104	74	174	712
Percentage distribution of earnings after training of persons in each pretraining earnings group:									
Total	100.0	1.4	1.9	17.0	14.6	19.4	11.1	15.5	19.2
Less than $1.25	100.0	4.9	5.2	32.7	19.0	15.2	8.8	8.5	5.7
$1.25–$1.49	100.0	1.8	5.6	31.2	20.2	18.7	7.6	8.8	6.1
$1.50– 1.74	100.0	1.5	2.1	26.2	19.7	22.9	9.7	10.8	7.1
$1.75– 1.99	100.0	.6	1.3	14.2	23.1	24.4	13.0	13.0	10.4
$2.00– 2.24	100.0	1.0	.7	9.1	10.9	26.8	15.6	19.2	16.8
$2.25– 2.49	100.0	.4	.4	6.2	9.8	18.1	20.2	23.6	21.3
$2.50– 2.99	100.0	.6	.5	5.1	5.3	12.3	11.0	32.5	32.7
$3.00 and over	100.0	.5	.1	3.2	3.0	9.1	6.5	15.2	62.4
Percentage distribution of pretraining earnings of persons in each posttraining earnings group:									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than $1.25	9.5	33.6	25.7	18.4	12.4	7.5	7.6	5.2	2.8
$1.25–$1.49	11.1	14.4	32.0	20.4	15.3	10.7	7.6	6.3	3.5
$1.50– 1.74	22.5	24.8	24.0	34.7	30.2	26.6	19.7	15.6	8.3
$1.75– 1.99	13.1	5.6	8.6	11.0	20.7	16.5	15.5	11.1	7.1
$2.00– 2.24	14.8	10.4	5.1	7.9	11.0	20.4	20.7	18.3	13.0
$2.25– 2.49	6.2	1.6	1.1	2.3	4.2	5.8	11.4	9.5	6.9
$2.50– 2.99	10.2	4.8	2.9	3.1	3.7	6.5	10.2	21.6	17.4
$3.00 and over	12.6	4.8	.6	2.3	2.6	5.9	7.4	12.4	41.0

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[1] Includes only those employed graduates reporting both pretraining and posttraining earnings.
[2] Earnings on last regular job.

TABLE D-3. Posttraining and pretraining earnings of a sample of employed MDTA institutional graduates enrolled during calendar year 1970, by sex and race

Straight-time average hourly earnings	Total trainees[1]			Caucasian			Negro			Other races		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total reporting earnings[2]	9,054	4,578	4,476	5,566	3,176	2,390	2,793	941	1,852	315	172	143
Percent	100.0	50.6	49.4	61.5	57.1	42.9	30.8	33.7	66.3	3.5	54.6	45.4
PERCENT OF TOTAL												
Posttraining hourly earnings:												
Less than $1.25	1.4	.9	1.9	1.4	1.0	2.0	1.3	.5	1.6	1.6	1.7	1.4
$1.25-$1.49	1.9	1.0	2.8	1.6	.9	2.5	2.7	1.2	3.5	1.6	1.7	1.4
$1.50- 1.74	17.0	10.7	23.3	15.2	10.2	21.9	20.5	13.0	24.3	17.8	14.0	22.4
$1.75- 1.99	14.6	9.5	19.8	13.9	9.1	20.3	16.9	12.8	19.0	15.6	9.3	23.1
$2.00- 2.24	19.4	17.0	21.8	18.3	16.7	20.5	20.6	15.4	23.2	21.3	16.9	26.6
$2.25- 2.49	11.1	10.8	11.3	9.9	9.5	10.5	12.0	10.4	12.9	9.8	7.6	12.6
$2.50- 2.99	15.5	20.0	10.8	15.9	20.0	10.5	14.4	19.9	11.6	15.6	20.3	9.8
$3.00 and over	19.2	30.0	8.2	23.7	32.6	11.8	11.6	26.7	3.9	16.8	28.5	2.8
Median earnings	$2.20	$2.49	$2.03	$2.24	$2.56	$2.04	$2.10	$2.42	$2.02	$2.16	$2.46	$2.02
Pretraining hourly earnings:												
Less than $1.25	9.5	4.9	14.3	8.7	4.3	14.6	10.5	3.8	13.8	7.3	5.8	9.1
$1.25-$1.49	11.1	6.4	15.8	10.1	6.0	15.6	12.6	6.0	15.9	13.3	9.9	17.5
$1.50- 1.74	22.5	16.0	29.0	20.1	14.6	27.4	26.7	19.7	30.2	30.5	19.8	43.4
$1.75- 1.99	13.1	12.0	14.3	12.1	11.1	13.5	15.6	14.9	16.1	9.8	12.2	7.0
$2.00- 2.24	14.8	16.9	12.5	14.9	16.8	12.3	14.1	16.5	12.9	13.7	13.4	14.0
$2.25- 2.49	6.2	7.9	4.5	6.8	8.2	5.1	5.5	8.6	4.0	3.5	4.7	2.1
$2.50- 2.99	10.2	14.4	6.1	11.4	14.9	6.9	8.5	15.1	5.1	7.9	11.6	3.5
$3.00 and over	12.6	21.5	3.5	15.8	24.2	4.6	6.5	15.3	2.1	14.0	22.7	3.5
Median earnings	$1.88	$2.16	$1.67	$1.98	$2.21	$1.68	$1.75	$2.08	$1.67	$1.74	$2.04	$1.64

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[1] Total includes 380 persons (4.2 percent) for whom race was not reported.

[2] Employed trainees reporting both pretraining and posttraining earnings.

TABLE D-4. Posttraining and pretraining earnings of a sample of employed MDTA institutional graduates enrolled during calendar year 1970, by socioeconomic and family status

Straight-time average hourly earnings	Total[1] trainees	Disadvantaged	Not disadvantaged	Head of family	Not head of family
Total reporting earnings[2]	9,054	5,061	3,993	5,618	3,411
Percent	100.0	55.9	44.1	62.0	37.7
PERCENT OF TOTAL					
Posttraining hourly earnings:					
Less than $1.25	1.4	1.7	1.0	1.4	1.3
$1.25–$1.49	1.9	2.6	1.1	2.0	1.8
$1.50– 1.74	17.0	21.9	10.7	15.6	19.0
$1.75– 1.99	14.6	16.6	12.1	12.9	17.6
$2.00– 2.24	19.4	20.4	18.0	18.7	20.5
$2.25– 2.49	11.1	11.1	11.1	11.4	10.6
$2.50– 2.99	15.5	14.0	17.3	16.5	13.8
$3.00 and over	19.2	11.7	28.7	21.6	15.3
Median earnings	$2.20	$1.84	$2.41	$2.24	$2.13
Pretraining hourly earnings:					
Less than $1.25	9.5	13.5	4.5	8.3	11.4
$1.25–$1.49	11.1	14.8	6.3	9.7	13.3
$1.50– 1.74	22.5	25.6	18.4	20.0	26.4
$1.75– 1.99	13.1	13.1	13.2	12.5	14.2
$2.00– 2.24	14.8	13.9	15.8	15.3	14.0
$2.25– 2.49	6.2	4.9	7.8	6.6	5.6
$2.50– 2.99	10.2	7.5	13.8	11.7	7.8
$3.00 and over	12.6	6.6	20.2	15.8	7.4
Median earnings	$1.88	$1.71	$2.12	$1.99	$1.74

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[1] Total includes 25 persons (.3 percent) for whom head of family status was not reported.

[2] Employed trainees reporting both pretraining and posttraining earnings.

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